



Chittering Trails Network Master Plan 2013-2023

Endorsed by Council 19 December 2012

The original draft “Chittering Trails Master Plan March 2008”* was prepared in line with a Council brief by;

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*Referred to in this document as “original draft”, with quotes in italic.

This “Chittering Trails Network Master Plan 2013-2023” is an audit of the original draft, reviewed with the permission of Mike Maher (Transplan) by;

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*Referred to in this document as “this Plan”.

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Purpose of the Plan

Our Vision

“A trails network which will cater for the community and visitors, with quality trails that are well promoted and linked. Use of the network will be an enriching natural and historical Shire experience”

Objectives

The objectives of this Plan remain much the same as outlined in the original draft;

- Access – where practical and appropriate, trails will enable access by people in wheelchairs, people with disabilities, family groups and the elderly.
- Coverage – the network will include, or link to, locations that provide opportunities for the community and visitors to discover the unique natural features and history of the Shire.
- History – the many physical reminders of past land uses and activities will form a major component of interpretive information available on the network.
- Information – the network will have consistent on-trail information as well as widely available trail brochures and maps.
- Interpretive Material – each trail will have either on-trail interpretive material or it will be included within trail brochures, providing trail users with a greater appreciation of the more interesting features to be found along the trail.
- Maintenance – the Shire will partner with the Community to care for the network under the direction of a regular maintenance plan.
- Environment – trails will enable greater opportunities to access the diverse range of physical features within the Shire whilst protecting the environs.
- Promotion – the Shire of Chittering will facilitate the promotion of the network.
- Quantity – the emphasis will be on the development of a range of quality trails, even if that means fewer trails being developed, thereby giving trail users a high order experience.
- Recreation – the network will be promoted as an additional component to the range of low cost recreational opportunities within the Shire.
- Signage – all signage will maintain a consistent theme across the Shire.
- Standards – trail construction, signage / trail markers and trail classification will comply with recognised Australian Standards, to ensure a quality trail experience throughout the Shire, state and nation.

Background

Location

Chittering is located on the outskirts of the Perth metropolitan region, just a one-hour drive north-east, so it is within easy reach of Perth’s population. The Shire of Chittering is well-positioned to take advantage of the growing popularity of bushwalking, mountain biking and horse riding. The locality is suited for both day-trippers and short break visitors.

Chittering boasts a varied range of landscapes with diverse wildlife and vegetation. The undulating hills offer amazing views over the beautiful Shire valleys filled with vineyards, lakes, river valleys, orchards, forest and remnant bushland areas.

Bindoon, located on the Great Northern Highway, is the central town within the Shire where the majority of services are found. It is well-placed to ‘capture’ the multitude of visitors who pass

through on their way from Perth to surrounding attractions such as New Norcia (monastic town), Dalwallinu (wildflowers) and beyond.

During his consultation Mike Maher (Transplan) ascertained that *“the community appears aware of the benefits of being located within one hour’s drive of Perth and the potential for attracting visitors to the area for recreation”*.

What Is A Trail?

The accepted definition of ‘trail’ for the purposes of this Strategy is *“...any corridor, route or pathway which has as its primary land usage any one of - or combination of - recreational walking, mountain biking or horse riding - and which passes through or has a strong connection to the natural environment.”* As such ‘drive trails’ will be considered network links.

The Role of Trails

As highlighted in the original draft, it is recognised by a range of agencies including tourism operators, local government authorities and health organisations that recreation trails perform a number of highly beneficial roles in the broader community:

- Provision of low-cost unstructured passive recreation for residents and visitors;
- Enablement of users to gain fitness, in turn fostering general well-being;
- Attraction of visitors when marketed well;
- Instillation of a positive conservation ethic; and
- A means of education, especially when good interpretation is a feature of the trail.

The (proposed) Shire of Chittering Sport and Recreation Plan 2012-2022 highlights the following relevant key findings from previous consultation;

- There is a shift from participation in organised sport to a desire to participate in less structured active and passive recreation;
- The natural environment is an untapped recreation resource that requires sound management practices.
- There is the potential for stronger links between sport and recreation and other aspects of the community such as youth, seniors, tourism, education and economic, social and environmental development.
- A community requirement for; footpaths, cycle paths, motorcycle tracks, bridle paths and tourist trails.

Existing Trail Supply

As per the original draft *“A number of walk trails exist within the Avon Valley National Park and informal walking can be undertaken in the Nature Reserves of the Shire. The existing trails need enhancement to make them more appealing than they currently are. In addition to the walk trails there are several ‘drive trails’ which either focus attention on the more widespread attributes of the area or link to surrounding areas.”*

The updated “Existing Trails Inventory” (see Attachment 1) and consultation undertaken (see pages 13 to 19) with various local parties reaffirms the following core characteristics of ‘existing trail supply’ that were identified in the original draft:

- *“There are a number of short walk trails, and walking opportunities, scattered throughout the Shire of Chittering. There are two long walk trails in the Avon Valley National Park / Peace Be*

Still, plus a portion of the 145km / 6-day Camino Salvado Pilgrim Trail passes through the Shire;

- *There are no formally recognised mountain bike (off road cycle) trails within the Shire, although anecdotally there appears to be a demand for these;*
- *Trails in the Shire of Chittering are currently not well packaged and promoted, with existing trails brochures having no consistent design and variance in the quality of presentation / information; and*
- *Apart from some interpretation installed along the trails emanating from Peace Be Still, little or no interpretation is provided on the trails, with signage in general appearing to be lacking.*
- *Horse riding opportunities appear to be available in several areas, although they are not well known or promoted."*

Proposed Projects

From The Original Draft

The original draft Plan proposed ten specific projects offering the potential to deliver solid and real benefits to the community; it recognised the needs and demands of local residents and visitors whilst taking advantage of the diverse range of attractive landscapes and vistas on offer. The 2008 five-year plan value of these projects was \$946,850.

In This Plan

This Plan proposes specific projects with the potential to fulfil the above – however in order to present a more achievable Action Plan the number of projects has been decreased to five and the Plan timeframe has been increased to ten years. With regards to the decrease in projects, in addition to cost considerations there are works that have been carried out during the past four years or have now been proposed to be undertaken by other parties.

The following list is arranged alphabetically, rather than in order of priority;

Project 1 Bindoon Townsite Heritage Trail (\$22,540)

(Design, Development and Link Project): a proposed new trail within the Bindoon townsite emanating from Clune Park, utilising existing footpaths where available with the addition of historical interpretive signage. With Clune Park as the trail head it will link with the existing Lake Needoonga and Stonehouse Trails.

Project 2 Blackboy Ridge Walk Trail (\$33,695)

(Enhancement Project, with the capacity to Design and Develop): addition of signage and interpretive materials at the trail head, maintenance of the existing walk trail, enhancement of the existing northern lookout with the possibility of developing a new trail looping back to the trail head. There would also be an opportunity to create an additional trail from the trail head to an existing southern lookout (currently partially in place as a walking opportunity along a fire access track).

Project 3 Carty Reserve Walk Trail (\$13,280)

(Completion Partnership Project): assistance with the completion of a project currently underway; parking, signage and trail construction is required to build upon the existing planning and interpretation work.

Project 4 Mountain Bike Trail (\$22,000)

(Feasibility Project): consideration of the construction of a long distance mountain bike trail, possibly passing through the Shire of Toodyay and City of Swan. This project would entail an investigation of land tenures, stakeholder views and other practical issues.

Project 5 Wannamal Heritage Trail (\$25,275)

(Enhancement Partnership Project): enhancement of the existing heritage trail in partnership with the local community, by designing, producing and installing interpretive panels along with 'standard' trail directional markers.

Other Projects

These projects could be considered should external funding become available and / or in partnership with other parties such as DEC, Peace Be Still and / or community group/s. Alternatively they could be revisited once the current Plan is reviewed or complete if not already undertaken;

Lake Needoonga Project

(Completion and Link Project, as per existing Development Plan): linking the existing Lake Needoonga Trail to the existing Stonehouse Trail by way of a Boardwalk across the lake, including interpretive signage for all three trails. The development plan also highlights the opportunity to extend the trail along the Brockman River, north from Clune Park along both sides of the river and south to the Brockman Centre. Additionally a Bird Hide could be constructed on a Boardwalk Spur. The existing development plan also highlights the opportunity to extend the trail along the Brockman River, north from Clune Park along both sides of the river and south to the Brockman Centre. Additionally a Bird Hide could be constructed on a Boardwalk Spur. Estimates indicate that this could be a \$377,000 project.

Country Club Estate

(Enhancement Project): signage update, naming and mapping of the series of 15 walking opportunities throughout the Country Club Estate area for the purposes of local user safety. If two directional style signs per walking opportunity were proposed, along with minimal map production this could be a \$16,000 project.

Udamung Reserve

(Design and Development Project): formalisation of a walk trail within the Reserve, encompassing the rehabilitated areas, the 'historic well' and 'original kerb-stoned road remnants', with interpretive material for the wide range of interesting vegetation. It might be preferable to DEC for a designated walk trail to be developed (utilising the existing tracks), enabling the existing vehicle tracks to be closed to motor vehicles. The establishment of a formalised walk trail would confine and direct reserve users to appropriate places and routes, with the capability of informing and educating users through messages on appropriately placed signs. There have been no cost estimates for this project.

Yozzi Road "Kyotmunga" Walk Trail

(Enhancement and Development Project): enhancements to the Lower Chittering located trail which traverses the most westerly section of the National Park affording stunning views. This trail forms part of the "Peace Be Still" suite of trails, there have been no cost estimates for this project.

Project Cost Summary

The original draft presented a five-year program of activity with a 2008 value of approximately \$946,850 and an average annual budget of \$189,370 (today's value with an average 2.7% inflation rate would be \$204,519) per year. As a relatively small local government area the Shire of Chittering has limited financial capacity therefore a ten-year initial implementation program may be preferable.

For this Plan costing estimates (see Attachment 3) suggest a total material cost of approximately \$99,195 with additional in-kind costs (Shire wages) of \$17,595. Operating (maintenance) costs for the trails are factored at an additional cost of \$9,314 per annum. This equates to the requirement for an average annual budget consideration of \$18,684. This amount does not take into account any funding that may be successfully sought.

General Summary

The summary contained in the original draft still stands.

In summary, the Shire of Chittering has an enviable array of physical and geographical attributes – including the Chittering Valley, the Brockman River, the Chittering Lakes and the Avon Valley National Park. It is only one hour's drive from Perth.

In addition, the quiet scenic back roads, orchards, vineyards and historic locations offer much to those visiting and touring the area by car. Together, these factors create the unique opportunity for a carefully targeted, well coordinated and achievable trail development program.

The Chittering Trails Network Master Plan sets out a simple project-focussed program of activity designed to deliver the maximum benefits to the widest cross-section of the community. It does not focus on developing new trails, but recognises the existence of a number of trails and walking opportunities. It supports the enhancement of what already exists along with the requirement for a carefully targeted, high-quality and ongoing marketing and promotion campaign.

Recommendations

It is recommended that Council:

- Resolve to endorse the Chittering Trails Network Master Plan.
- Refer the endorsed Chittering Trails Network Master Plan to the Department of Environment and Conservation (DEC) in order to seek their continued support with respect to the development of trails within the Avon Valley National Park; as well as the potential for a trail in the Udamung Nature Reserve.
- Consider the inclusion of an annual budget allocation for the implementation of the projects contained within the Chittering Trails Network Master Plan.
- Research and seek funds from other sources and funding programs for the projects contained within the Chittering Trails Network Master Plan.
- Ensure that this Chittering Trails Network Master Plan becomes an integral part of the proposed Chittering Tourism Action Plan.

SECTION 1: PROJECT OBJECTIVES AND METHODOLOGY

1.1 Background

The preparation of a Chittering Trails Master Plan was commissioned by the Shire of Chittering with the objective being to produce a conceptual plan to identify existing trails and assist in forward planning for the provision of new trails throughout the Shire of Chittering. The draft document was presented to Council at their Ordinary Meeting held on 16 April 2008, with the resulting Resolution of Council;

240408

Moved Cr Douglas / Seconded Cr Mackie

"That

- (a) The draft Trails Master Plan be put out for Public Comment;**
- (b) A public meeting be held on the matter before the end of June 2008;**
- (c) Detailed investigations be carried out on various sources of funding, with the construction proposals to be varied in accordance with the most advantageous positions over the next 2 years;**
- (d) Provision be included in Council's "Financial Plan for the Future" over the next 6 years for a Council contribution towards Trail upgrading and constructions."**

CARRIED [6-1]

The draft Chittering Trails Master Plan was advertised for Public Comment in the Gingin-Bindoon-Bullsbrook Advocate on 14th May 2008. There is then no further reference to the draft Chittering Trails Master Plan in the Shire's records. It was not endorsed by Council meaning that the recommendations contained within the Plan were not formally acknowledged.

1.2 Need for a Trails Master Plan

Trails link with a range of other planning processes, including but not limited to, tourism, open space planning, regional planning, economic development and natural resource management planning. In the original draft Mike Maher states that *"experience elsewhere indicates that recreational trails can indeed be a focal point for quality tourism with the right infrastructure and the right packaging, recreational trails can be a significant component of a sustainable tourism industry capitalising on significant natural assets"*.

1.3 Scope of the Chittering Trails Network Master Plan

As per the original brief;

- Develop a vision statement that sets out Council's and the community's desire for the orderly and progressive establishment of a trails network within the Shire.
- Provide an inventory of existing trails including their purpose, general condition and use.
- Identify potential trails while having due regard for other land owners such as adjoining local governments and land managed by DEC and the DPI.
- Map trails within the Shire of Chittering.
- Undertake a trail 'gap analysis'.
- Provide preliminary cost estimates and priorities for the upgrading of existing trails and development of proposed new trails.
- Identify funding opportunities to be researched for trail development.
- Undertake community / stakeholder consultation.
- Identify management and maintenance issues associated with existing trails and the development of new trails including linking known or new walk trails with drive trails.
- Make recommendations and provide advice on marketing and promotion of the Shire's trails network
- Make recommendations on matters that could be interpreted along each of the existing and proposed trails.
- Provide guidance on trail signage, including directional markers, promotional signage, warning and advisory signage.
- Develop guidelines for the development of interpretative information and signage styles on existing and future trails, as well as recommendation in this regard.
- Provide guidance on ways to link the existing and proposed trails, including the option of drive trails and through promotional materials.
- Identify tourism opportunities including the potential of trail themes and tourism opportunities for marketing and cross promotion, for example; recreation and leisure, cultural and heritage, flora, rare flora, fauna and bird life, agricultural experiences.
- Identify environmental issues to be considered and developed in consultation with the community and key stakeholders.

1.4 Trails Planning

There are two basic elements to trails planning and development prior to construction:

- Trails Master Plan (across a Local Government, sub-region or region); and
- Trail Development Plan (for individual trails) to prepare construction ready material.

WA Trails Strategy	Local Government Trails Strategy	Individual Trail Feasibility Study	Trail Development Plan	Trail Construction	Trail Maintenance
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The Trails Master Plan is at an early stage in the trail planning and development spectrum. Further detailed trail planning will be required for trail projects to proceed successfully.

This process ensures a focussed approach, with maximum return on investment. This approach has been recognised by the Department of Sport and Recreation through its trail funding in partnership with Lotterywest as it ensures that trails are well designed and supportive of relevant trails master plans.

1.5 Methodology

Mike Maher (Transplan) stated that his initial discussions with the Shire of Chittering “*established their desired outcomes and clarified the requirements of the brief, revealing their intentions, the prevailing attitudes towards trails development, the role of trails within the local community and importantly some local insight into the availability of, and scope for, trails within the Shire*”.

1.5.1 Research

In the preparation of the original draft Mike reviewed background material influencing the supply of, or demand for, trails within the Shire of Chittering with particular attention to any information pertaining to existing trails, or proposed trail projects, digital mapping data was obtained in preparation for his fieldwork. During the preparation of this Plan the Shire of Chittering ensured that any out-of-date information was updated.

1.5.2 Consultation

Input was sought (both during original and subsequent consultation) from interested local people. Inclusion is crucial to the successful preparation and implementation of any Plan.

1.5.3 Fieldwork

There is no substitute for physically walking existing trails, therefore the trails were traversed during both the original drafting and the subsequent update.

1.5.4 Reports

Following background research, consultation and in-the-field assessment, Mike compiled a report which dealt with all matters set out in the Brief. This Plan is a review of the original draft.

1.5.5 Chittering Trails Network Master Plan

A final draft of this Plan will be submitted to Council for their consideration, endorsement and adoption. Action will be able to commence soon after in line with budget considerations and available funding.

SECTION 2: CONSULTATION

2.1 Chittering Shire Staff

2.1.1 Brendan Jeans, Senior Planning Officer

Brendan advised that the Shire owns a relatively small amount of land – 162 hectares. This represents 0.135% of the total area of the Shire. This land is allocated to various uses including, but not limited to, recreation, housing, public buildings, water tanks, drainage and cemetery.

2.1.2 Azhar Awang, Executive Manager Development Services

Provided the following input:

- The current copy of the Municipal Heritage Inventory can be located in my office.

- According to recent data, the Shire of Chittering is experiencing an increase of approximately 6% growth rate. In order to accommodate the future needs of the community, the existing recreational facilities in Muchea and Bindoon are not adequate to accommodate the increased use of these facilities. Furthermore the facilities are not designed to accommodate future expansion.
- An area for recreational facility has been earmarked in Maryville at the corner of Muchea East Road and Santa Gertrudis (approx 10 ha). However the site is subject to a subdivision condition by the developer who is currently in negotiation with Council in the future release of this land.
- Part of the standard subdivision consideration where there is an existing water course is that the area be set aside as a water course / drainage reserve or for recreation / conservation purposes in accordance with Council's Local Planning Strategy. The area allocated for use as a recreation / conservation reserve has the potential to be used for walk trails, however they need to be managed given the conservation sensitivity of the area.
- In reference to the realignment of the Lake Needoonga trail, the proposal will require approval from DEC and that the proposed trails must be contained within the reserve. I don't have any problems in realigning the trail however this must be taken into consideration regarding the Bindoon Townsite development in terms of future road linkages.

2.1.3 Jim Garrett, Executive Manager Technical Services, Shire of Chittering

Advised that a budget of \$700 per 100 metres would need to be applied to trails requiring initial high level maintenance / upgrade.

2.1.3 Glenn Sargeson, Principal Environmental Health Officer, Shire of Chittering

Advised that a budget of \$700 per 100 metres would need to be applied to trails requiring initial high level maintenance / upgrade.

2.2 Department of Environment and Conservation

2.2.1 Terry Goodlich, Acting Trails Coordinator (State)

Advised that DEC have a Visitor Risk Management Policy. Local Government are encouraged to adopt something similar, it covers;

- Signage
- Limiting accident risk with use of an electronic risk calculator (which can also aid maintenance program)
- Regular checks (3 monthly on long trails / 12 monthly on short) and a maintenance program
- If there are 'issues' (dangers on a trail due to hazards, including fire) the options are to close the trail, re-route the trail, repair the trail and / or put warnings in place
- Use trail classifications 1 to 6, noting that there would probably not be any Class 6 trails within Chittering.

2.2.2 Michael Phillips, Visitor Risk Management Coordinator (State)

Advised that a three-day accredited workshop was run in Perth in September 2012 (will be 6 – 12 months before it is run locally again);

- LEARNING OUTCOME 1: Demonstrate a sound understanding of the Departments Visitor Risk Management Policy, including the objectives and strategies.
- LEARNING OUTCOME 2: Identify the responsibilities of the Department to meet requirements of statutory legislation, "duty of care" and moral obligations relating to Visitor Risk Management, including demonstrating through the analysis of a case study the principles of relevant legislation, common law, and negligence and discharge of duty of care.
- Reference should be made to AS 2156.1 (can be purchased through SAI Global for \$74.36).

2.2.3 Gil Field, Interpretation Section (State)

Advised that our signage requirements would be as follows;

- Directional signage to trailhead: approximately \$500 each.
- Site identification signage: 800x600 vertical or inclined panel, full colour print onto vinyl with 2 part epoxy graffiti protection, approximately \$1,500 each (aluminium, including posts and graphic design).
- Trail markers: 100mm square with arrow within, approximately \$25 each (including post).
- Trailside signage (400x300 inclined) for interpreting natural and cultural values approximately \$750 each.

Gil offered to have the DEC assist with and / or organise any required signage on our behalf.

2.2.4 Jamie Ridley, Parks and Visitor Services Coordinator (Perth Hills)

Provided the following input at a meeting held at the Shire office on 26 September 2012;

- Experience shows that for the average visitor the ideal trail length is 800m, when a trail is over 1000m it can become restrictive.
- Longer trails are aimed more for dedicated walkers rather than visitors. Longer walks require facilities, would suggest promoting the "Peace Be Still" trails as the longer trails rather than looking into creating new long trails.
- It appears that the requirement for walk trails has peaked meaning that the need for new trails is declining. Mountain-bike trails are coming to the fore as a requirement (see Goat Farm, Mundaring and Langford Park, Serpentine-Jarrahdale as examples, usage of Langford Park has doubled in 12 months to 48,000).
- For the Shire to create a trail on DEC land the demand and prospective usage needs to be proven along with a maintenance / sustainability plan.
- Visitors to a townsite tend to want a trail that takes 1 to 2 hours to complete, that showcases the place and its history. New trails should link what already exists.
- Recommend looking at Serpentine-Jarrahdale DVD / Booklet.
- Recommend "Park Note" style information (will supply template) as each 'note' can be individually updated where required without costly reproduction of a brochure.
- Suggest liaising with Kalamunda, Mundaring and Serpentine-Jarrahdale for cross-marketing of trails / attractions.
- Once a trail has been named / signposted it is considered as 'managed'.
- Assistance with trail classification by DEC staff.
- For local needs, surveys need to be trail specific (can't use results from other surveys), traffic counters can be used for incoming traffic, there are pedestrian counters available but not as efficient.
- "making money" through trails, look at events / sponsorship. DEC have recently 'got into' issuing permits for rave-style parties that are commercial ventures. These permits attract a bond and a fee, and allow DEC to apply conditions to the use of the land.
- Might be best to maintain / enhance / link existing trails rather than plan new trails, noting that the Boardwalk Project could be cost prohibitive.

2.3 Wendy Gellard – Peace Be Still

Wendy still has her passion for trails and love of 'the outdoors' along with the various trails that she has developed on her Peace Be Still property and the adjoining Avon Valley National Park:

- Garden of Gethsemane
- Harry Butler Trail

- Mill Walk
- Out and Back Trail
- Over The Hill
- Ridge Top Circle
- River Camp
- Special Valley Walk
- Stations of the Cross
- To The Park
- Valley Views Walk Trail
- Valley Views 2 (also known) as Yozzi Road and “Kyotmunga” Walk Trail

All of the trails have directional markers, and some have interpretive signage. The directional markers are treated pine posts that have the top painted and an indication as to which trail it is, ie VV is Valley Views. Wendy leads guided walks on a monthly basis during the cooler months and actively promotes the trails of the Shire of Chittering through an information shelter that is set up opposite Peace Be Still at 1299 Chittering Road.

Wendy strongly supports the idea of improved / matching signposting and marketing material across the trails of Chittering. The Shire of Chittering has recently supported Wendy with meeting the cost of reprinting her “Walking In The Bush At Chittering With History As Your Guide” booklet.

2.4 Chittering Landcare Centre

2.4.1 Sue Metcalf and Sue Pedrick

Provided the following input at a meeting held on 4 September 2012:

- The Lake Needoonga trail (boardwalk) was reviewed by the Conservation Commission some years ago, and approved, but the proposal lapsed as it seemed likely that it would require a Section 18 Notice of Application under the Aboriginal Heritage Act 1972, and review by the Aboriginal Cultural Material Committee and an opinion as to whether there is any Aboriginal site on the land subject to the section 18 Notice.
- Recommend the extension of the Lake Needoonga trail north (and south if this is DEC land) along the Brockman River from Clune Park. Future subdivisions may enable a trail to be located along both sides of the river, with a short bridge or boardwalk being required.
- Consider establishing a wildflower garden nature walk in the disused section of Clune Park east of the river with local plants, this would connect the picnic area with existing trails and be a point of interest for tourists.
- Agree that a boardwalk and bird hide at Chittering Lakes Nature Reserve (DEC managed reserve on eastern side of Great Northern Hwy) would enable observation of many different birds.
- Agree that the existing trail in the Blackboy Ridge Reserve could be upgraded, including repairs to the steps along with interpretive panels along the trail. Suggest creating a return loop from the lookout so that trail users do not have to retrace steps back to parking area.

Provided a “Blackboy Ridge Lookout Trail Proposal dated 1 April 2003;

- Trail Head sign: \$600 in 2003, with Shire to install **note, Landcare are currently working on this with existing funding that they have available*
- Trail Markers: \$200 in 2003, with Shire / volunteers to install
- Return Loop: (add 0.5km), pruning and step construction, \$60 in 2003, with Shire / volunteers to supply labour
- Log Seating: \$200 each in 2003 (at lookout and points of interest along trail, two to six recommended)

- Lookout sign: \$1,200 in 2003
- Trailside signs: \$500 in 2003 (suggest two)
- *Note: a funding application was submitted to Lotterywest Trails Funding which was not supported at that time*
- Recommend the extension of the Blackboy Ridge southern firebreak 'walk trail' to the lookout in the southern sector of the reserve.
- Not keen for horses or mountain bikes to be allowed within the reserve, even on the firebreaks, due to the potential for erosion and the spread of weeds / dieback. Suggested that the reserve have "conservation of flora and fauna" added to its vesting purpose.
- Suggest need for walk trail at the DEC managed Udamung Nature Reserve, as a tourist attraction the old well is still there along with remnants of an old road (with kerb stones). The wildflowers and vegetation are very interesting.
- Ideas for the Carty Reserve area, stage one of a revegetation and associated interpretive area (focussed on Carnaby's Black Cockatoo's) is already underway.

2.4.2 Rosanna Hindmarsh

Provided the following input at a meeting held on 20 September 2012:

- Supportive of extension of Sculpture Trail into trail heads (such as Blackboy Ridge, Clune Park), mentioned that the original plan had looked at putting a boat sculpture in the water at Clune Park but that had proved too difficult 'red tape' wise.
- Suggested addition of a walk bridge near the main bridge to form a walking loop.
- Advised that with regards to the Boardwalk and Hide (note, Hide should be place over deepest part of water) an application for a Section 18 approval needs to be submitted by the Shire to the Department of Indigenous Affairs (14 week process, includes consultation with relevant Aboriginal people).
- Explained that Spoonbill Lake trail is / can be a loop trail as the lake (was a series of dams) can be crossed near the Fire Station. Firebreak on other side would need to be checked.
- Carty Reserve 'trailhead' to Hart Drive is 1.5km one way, could become a 3km loop, could link into Spoonbill for a longer walk.
- Julimar Lookout, would possibly be better closed, not the best view, no facilities (picnic table could be relocated).

2.5 Jenifer Collins – Department of Sport and Recreation

Provided the following input at a meeting held on 27 August 2012:

- Jen was fully supportive of the marketing and improvement of existing trails within the Chittering area.
- She felt that a 10-year plan rather than a 5-year plan (as per the original draft Trails Master Plan) would be more achievable and well-received by Council / potential funders.
- With regards to funding, Jen highlighted that \$15,000 projects require no matched funding [through the Lotterywest – DSR Trails Program] which presented a good opportunity for inclusion in the first year of the Action Plan due to not having an allocation within the current budget.
- She suggested that the first projects be very visible ones.

2.6 Colleen Osborn, Tourism Promotion Officer – Chittering Tourist Association (Inc)

Colleen has observed that a large number of visitors passing through Bindoon via the Information Centre ask about local trail / walking opportunities. Currently the handouts are a range of black and white photocopied A4 sheets which does not present well.

2.7 Jo Buegge, Avon Be Active Coordinator – Shire of Toodyay

Jo advised that the Shire of Toodyay is in the process of looking at developing new walk trails and finding hidden existing tracks and would be interested in looking at 'linking' paths with the Shire of Chittering as it would be a great way to encourage walks in the bush. She suggested that "maybe we can create our own Bibbulman Track one day". She requested "Please keep me in the loop with your projects, they sound exciting!".

2.8 City of Swan

To date no input has been provided following emails on 20/09/12 (DWS Doc No 2415804) and 09/10/12. Confirmation of receipt received and advice that the email had been passed to the relevant department (twice).

2.9 Alex Douglas, Chairperson – Community Planning Advisory Committee

Awaiting compilation of comments, as per return email dated 21/09/12.

2.10 Maryke Beveridge, Member – Australian Trailhorse Association and WA Horse Trackers

Maryke contacted the Shire offices by telephone on 12 September 2012 after being made aware of the proposed Master Plan through local advertising, she advised as follows;

- There are no formal horse trails in the Chittering area;
- She is currently riding within Julimar Forest to locate trails, the purpose of this being to be able to participate in the WA Horse Trackers regular rides where the groups take turns to go to different member locations;
- She feels that maps / signage are required; and
- Trailheads for horse trails would need to have adequate parking / turnaround areas for horse floats.

Maryke was pleased to hear that the Trails Master Plan was being revisited, and that consideration would be given to horses.

2.11 Paul Neve, Owner – Neve [Professional Trail] Construction

As well as being a Professional Trail Constructor, Paul is a Life Member of the Perth Mountain Bike Club and a Recreational Trailbike Riders Association Committee Member. I contacted Paul by phone on 13 September 2012 upon the advice of Cr Norton.

Paul advised as follows;

- There are no formal mountain bike or motorbike trails within the Shire of Chittering
- The Shire is a perfect location for trails of all kinds due to its proximity to Perth, the rural nature of the area, its expansion through land releases and range of perfect terrains
- Trails could / should be included in new developments, even if they are just as part of the road verge
- The development of a State Mountain Bike Strategy is currently underway which will represent a good reference tool
- The Shire itself only has a small percentage of public space available, so there is the need for liaison with the DEC for the use of their land
- The Julimar State Forest would be the perfect location for planned, delineated user trails
- The Avon Valley National Park is also a good ride venue
- Suggested: 150km loop guided 'event', Bullsbrook (needs area for parking) – Julimar – Bindoon – Bullsbrook for registered off-road two-wheeled vehicles

- Suggested: Bindoon as the Trail Head of an Off Road Motor Cycle Trail Network, leaving and returning to Bindoon. Have a number of 100km mapped trails of varying difficulties from Green Circle (easy) to Black Diamond (hard).

It was put to Paul that it seemed that the Julimar State Forest as a trailbike area was currently 'a secret that was now getting out' and that it would be preferable to be proactive by having trails put in place, he agreed with this philosophy.

Paul offered his support for the proposed Plan, along with his assistance where it may be required, including volunteering in an advisory role.

2.12 Anna Jamieson, BeActive Officer (Shire of Chittering)

Anna provided the following report notes;

With limited sport and recreation facilities across the Shire of Chittering, residents have limited opportunities to participate in sport and recreation outside of organised sport. Access to incidental physical activity such as walking, cycling, and running enables low cost participation in regular physical activity. By developing and implementing a master trails plan, the Shire of Chittering is promoting physical activity by local residents and visitors to the region.

The Wheatbelt currently has the highest rate of overweight/obesity of any other region in Western Australia, with one third of the adult population being overweight or obese and more than 50% of the population being insufficiently active (WA Country Health Service). Statistics such as this relay the importance of promotion and access to physical activity opportunities. Walking and cycling trails, particularly loop trails, are generally well utilised by the public for health and fitness purposes, and also enable greater opportunities for establishment of walking groups, cycling groups, local events, and mountain bike activities. Trails also support sports such as horse riding and trail bike riding where public safety allows. Support for such sports will assist in club or exercise group developments, with possibilities emerging for new clubs such as mountain bike and cycling groups, as well as potential establishment of events such as fun runs, rides, and the like.

Establishment of loop trails and connecting trails enables implementation of staged stretching/exercise stations (see Calico) further promoting health and wellbeing within the community. Additionally, trails provide families with opportunities to be physically active together, particularly where park facilities are located along the trail or at the trail head.

Access to health and medical services is also limited within the Shire of Chittering, placing greater emphasis on the need for health promotion and increased access to and participation in physical activity as a means of preventing lifestyle illnesses such as type two diabetes, heart conditions, overweight/obesity, depression, osteoporosis, and some cancers. Physical activity is imperative to ongoing health and wellbeing and is proven to alleviate the onset and severity of many ailments. By providing access to walking and cycling opportunities through implementation of the master trails plan, the Shire of Chittering is not only promoting health and wellbeing of residents and increasing tourism, but is also acting to alleviate the burden on local health care service providers.

2.13 Janet Cameron – WA Horse Council

Janet advised that she has plenty of contacts in the Chittering area as she used to live at Wannamal and her father is Mal Taylor (former Shire President). She still rides in the area occasionally and is also a walker and cyclist. She sat on the assessment panel for the Lotterywest Trails Grants in 2008 and 2009, and the Top Trails Assessment Panel for the Top Trails Project.

Janet is not currently available to meet due to other commitments but expressed her interest in being involved with the process.

2.14 Chittering Community

A Community Meeting was held in March 2008 and the input provided at that time which is still considered relevant is as follows;

- Community members had been previously involved in the preparation of a Chittering Trails Master Plan.
 - NOTE: This means that this current proposed Plan will be the third that they have been involved in.
- Suggestion that upon upgrade / development each trail should be promoted with a new brochure.
- Suggestion that Chittering be marketed as the “gateway to the Avon Valley”, with a series of trails in conjunction with DEC, the Shire of Toodyay and the City of Swan.
 - NOTE: Gidgegannup has started to use that term, plus Northam uses “heart of the Avon Valley, gateway to the Wheatbelt”.
- Suggestion that a Mountain Bike Trail feasibility study should be undertaken.
- Suggestion that drive trails should link historic sites and that access via private property should not be necessary.
- Representatives of the Chittering Country Club Estate supplied a report and maps outlining the public open space walking opportunities in the Chittering Country Club Estate.

SECTION 3: CHITTERING TRAIL SUPPLY ANALYSIS

3.1 Overview

The Shire of Chittering has an adequate supply of walk trails in natural areas scattered throughout the Shire, with the issue being the standard of the existing trails and the lack of a coordinated promotion. Some of these trails are also sign-posted as being suitable for horse riding, but there are no formally advertised bridle trails. Mountain biking trails appear non-existent.

Local residents do walk and ride horses in bushland areas, and people do come from Perth specifically to walk.

3.2 What Is A Recognised Walk Trail?

‘Recognised’ means that the trail has some or all of the following characteristics:

- Recognised by the land manager (eg. DEC, Shire Council); and / or
- Signage; and / or
- Mapping (such as a map contained within a trail brochure).

3.3 Trails Inventory

Attachment 1 lists existing trails based on information from a number of sources:

- Various stakeholders;
- Brochures, trail maps and books;
- Members of the community; and
- Shire of Chittering staff.

3.4 Condition of Existing Trails

As observed in 2008 *“the trails vary in condition, depending on the level of maintenance they receive, the amount of use they get, the environment in which they are located and a host of other reasons. All recognised trails will require ongoing maintenance to ensure that they remain appealing.*

Directional signage that conforms to Australian Standards is lacking on the trails and trailhead signage (with mapping of the trail route) would benefit all trail users on trails that are identified as

being public trails rather than ‘local walking opportunities’. This signage should indicate length of trail, duration (at a moderate pace), difficulty level, points of interest along the trail route, local access points and connections to nearby residential areas, a ‘code of conduct’ for permitted user groups, safety information, etc. The addition of interpretive signage can encourage use and enrich the users experience.

Attention to trail surfaces, structures (including steps and water bars to prevent erosion) and trailside furniture should be an integral component of an upgrading program. Removal of overhanging and side vegetation (and weeds) should also be regularly undertaken.

Finally, all trails should have information readily available – and a trail brochure is an easy and cheap means of providing information.”

3.6 Trail Classifications

In looking at the Classifications, as detailed in the table following, it would be imagined that within the Shire of Chittering the trails would fall between Grade 1 and Grade 3.

Measure	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
Distance	Distance to complete walk. x m.	Distance to complete walk. x km.	Distance to complete walk. xx km.	Distance to complete walk. xx km.	Distance to complete walk. xx km.
Gradient	Flat.	Slope / gentle hills.	Short steep hills.	Very steep.	Very steep and difficult.
Quality of path	Well formed track.	Formed track.	Formed track, some obstacles.	Rough track, many obstacles.	Rough unformed track.
Quality of markings	Clearly sign posted.	Clearly sign posted.	Sign posted.	Limited signage.	No directional signage.
Experience required	No experience required.	No experience required.	Some bushwalking experience required.	Experienced bushwalkers.	Very experienced bushwalkers.
Time	High and low estimate of completion time (eg 20-30mins).	High and low estimate of completion time (eg 1.5-2hrs).	Time needed to complete track (hours/days).	Time needed to complete track (hours/days).	Time needed to complete track (hours/days).
Steps	No steps.	Occasional steps.	Many steps.	N/A	N/A

3.6 Trails Network Strengths

- beautiful landscapes with undulating topography enabling magnificent views
- part of the magnificent Avon Valley National Park
- a number of bushland reserves
- numerous historic sites with a rich indigenous history and more recent European history
- bushland areas (and road verges) with a wonderful array of wildflowers.

3.7 Trails Network Opportunities

- general lack of information, what is available is basic and some is poor quality
- lack of consistency in information
- varying types / levels of interpretation on the trails

3.8 Mapping

No mapping was located with the original documentation, nor was mapping provided with the electronic version supplied. Appropriate and adequate mapping is essential for trailhead signs and promotional material. Maps provide a quick visual representation of the trail route – indicating primarily the route of the trail, the destination, whether it is out and back, or a loop. Good mapping will contain an array of information, including:

- access roads from nearby towns (and distances)
- north point and scale bar
- trailhead location and facilities (eg. parking, picnic tables, toilets, barbecues, etc)
- difficulty level (easy; moderate; difficult; disabled)
- length and duration (and direction of travel if one-way loop)
- points of interest along the trail, including geographical features
- symbols indicating location of interpretive panels (if any)
- other information if relevant and appropriate, such as crossroads, cross tracks, trailside furniture (seats, shelters, lookouts), viewpoints, emergency (fire) escape routes, etc.

See Attachment 2.

SECTION 4: LINKS BETWEEN TRAILS – DRIVE TRAILS

4.1 Overview

Drive trails can assist with generating increased visitor flows and have an important role to play in managing appropriate access to natural places to reduce environmental impacts.

4.2 Inventory of Drive Trails

The list of existing drive trails (below) is based on information from brochures, trail maps, signage and books;

Artists, Astronomers, & Abbots	Gingin to New Norcia Trail	Was in old Turquoise Coast brochure. We could reinvent this in conjunction with the proposed Artists / Sculpture Trail (see below); • Gravity Discovery Centre, Gingin • Brockman Centre, Bindoon & proposed Bindoon Artists Trail, incl. Sculpture Trail (promote overnight stay) • Benedictine - New Norcia	101km
Art & Sculpture (proposed)	Will depend on final destinations	Julie Stitt, Shelley Higham *see Artists, Astronomers and Abbots above	
Chittering Valley Tourist Way	Wanneroo Rd – Pinjar Rd – Neaves Rd – Great Northern Hwy (Route 259)	Described in Tourist Drives of Western Australia, signage at each end	70km
Chittering Valley Wine Trail	Brand Hwy, Great Northern Hwy, Chittering Rd, Chittering Valley Rd, Bindoon-Moora Rd, Mooliabeenie Rd	Brochure along with website, produced and managed by the Chittering Wine Trail Association	71km
Discover Golden Horizons	2 Day: Perth to Dalwallinu via Moora and return to Perth via Wongan	Comprehensive brochure, marketed in conjunction with other towns (Calingiri, Dalwallinu, Moora, Wongan-Ballidu)	515km

	3 Day: Perth to Wongan via Calingiri, Wongan to Moora via Dalwallinu, return to Perth		519km
Sculpture Trail	Chittering Road, Chittering Valley Road – linking to Great Northern Hwy	Various brochures, including 1 Hour from Perth Chittering Valley. Needs reinstatement of Interpretive Signage (liaise Carolyn Coleman). Currently in the process of being expanded through Chittering Community Planning Advisory Committee input and support.	Not recorded
Turquoise Coast	Ten x 1 to 5 day tours, which include Chittering	Brochure produced by “Turquoise Coast Tourism”	Various
Wannamal Heritage Tour	Bindoon-Moora Rd, Great Northern Hwy	Brochure produced by local community	Not recorded

SECTION 5: TOURISM OPPORTUNITIES

5.1 Heritage Tourism

As quoted in the original draft, “a paper titled “State Highway 43 – A Case Study of a New Zealand Heritage Trail” Julie Harris of Massey University (NZ) describes a heritage trail as follows: ‘A heritage trail enables a visitor to link the historical, natural and cultural heritage within the region by either walking, cycling or driving. ... the essence of the heritage trails product is to provide visitors with an opportunity to learn more about the local or regional area they are visiting and an opportunity to provide an economic and social base for regional tourism development.’”

Also quoted was Phil Young, the Managing Director of the Tourism Council of Australia, with reference to “Heritage Tourism – Bringing People to the Bush”: “Heritage and tourism well-mixed can be a potent stimulant for regional communities. There are abundant tourism opportunities for regional and rural Australia and we need to capitalise on these.”

Themed drive trails can generate significantly increased visitor flows (with consequent economic and business stimulation outcomes) and serve a strong role in managing appropriate access to natural places, thereby reducing environmental impacts accruing from increased visitor numbers.

5.2 Sculpture Trail

Remains as stated in the original draft, noting that currently there is ongoing promotion to aid with the expansion of the trail.

Mike Maher stated “Several impressive sculptures have been installed along Chittering Road and Chittering Valley Road. Unfortunately, these installations are very difficult to find, as signage indicating their presence is virtually non-existent. In addition, at least one of these installations is located in an extremely dangerous location (near a crest) with no lay-by for visitors to stop safely at. Although outside of the scope of this Trails Master Plan brief, the works tables provide an allowance for improved ‘site signage’ for the Sculpture Trail and an allowance for the development of formal lay-bys. Relocation of at least one of the installations (to a safer location) is recommended.”

It is suggested that a main Drive Trail is marketed that links the Chittering Valley Tourist Way, with the Chittering Valley Wine Trail, the ‘expanded’ Sculpture Trail as well as linking with Flora Roads – Maddern, Spillman and Reserve – and other attractions.

5.3 Mountain Bike Trail - Park

With the increase in the popularity of Mountain Biking there could be merit in the addition of a trail and / or park within the Shire of Chittering as a means of attracting visitors to the area.

5.4 Horse / Bridle Trails

With reference to the WA Equestrian Tracks and Trails Study (prepared by Enviro-Agriculture Environmental Consultant in June 2006 for the WA Horse Council), the following statements in the Study are relevant to this Plan;

- With the current climate of health and fitness being an important part of people's lives and the emphasis of encouraging the youth of today to have an outdoor activity that is safe and will benefit them socially and assist in maintaining a healthy and fit lifestyle, horse riding is an ideal activity.
- Endurance riding is continually growing in interest – the majority of surveyed horse riders were looking for a change from normal training and also for a relaxed and enjoyable ride in natural surroundings.
- Local Government Authorities and Tourism WA to encourage bed and breakfast type home businesses with agistment facilities.

Therefore it would appear to be of benefit for horse riding trails to be considered during this trails network process.

SECTION 6: PROJECT COSTS

Cost Calculation Summary

Project costs (divided into direct costs and in-kind costs) have been calculated (excluding gst) based on the following;

- Boardwalk construction (1.5 metre wide) estimated at \$1,085 per metre
- Community Group research / writing estimated at \$225 per day
- Consultant estimated at \$1,100 per day
- Directional signage budgeted at \$500 per sign
- Drive trail markers budgeted at \$250 each (estimate 1 per 1000m)
- Interpretive signage budgeted at \$750 per point
- Landcare research / writing estimated at \$550 per day
- Level 1 Community Engagement (advertising) budgeted at \$250
- Level 2 Community Engagement (Level 1 plus online survey) budgeted at \$750
- Level 3 Community Engagement (Level 2 plus workshop) budgeted at \$2,000
- Shire Staff (EDO) hours calculated at \$65 per hour / \$520 per day
- Shire Staff (Executive) hours calculated at \$100 per hour / \$800 per day
- Shire Staff (Outside Crew) hours calculated at \$55 per hour / \$440 per day
- Shire Staff (Plan) hours calculated at \$75 per hour / \$600 per day
- Site identification "trailhead" signage budgeted at \$1,500 each
- Trail (1 metre wide) construction (clear and compact) estimated at \$15 per metre
- Trail (1 metre wide) design and construction estimated at \$25 per metre
- Trail (1 metre wide) enhancement / maintenance (tidying and erosion control) estimated at \$7 per metre
- Volunteer hours calculated at \$25 per hour / \$200 per day
- Walk trail markers, including post, (recommend 1 per 100m) budgeted at \$25 each

The projects are currently listed alphabetically; following public consultation a prioritised list will be established. See Attachment 3 – Cost Estimates for a breakdown of each project's estimated costs.

6.1 Bindoon Townsite Heritage Trail – Design, Develop and Link

A proposed new trail, with a length of up to 2km (possibly in two parts in order to appeal to the short-walk visitor), within the Bindoon townsite utilising existing footpaths with the addition of historical interpretive signage, emanating from Clune Park so as to link into the existing Lake Needoonga and Stonehouse Trails. **Estimated Project Cost: \$22,540**

6.2 Blackboy Ridge Walk Trail – Enhance

Addition of signage and interpretive materials at the trail head, maintenance of the existing walk trail, enhancement of the existing northern lookout with the possibility of developing a new trail looping this trail back to the trail head. There would also be an opportunity to create an additional trail from the trail head to an existing southern lookout (currently partially in place as a walking opportunity along a fire access track). **Estimated Project Cost: \$33,695**

6.3 Carty Reserve Walk Trail – Partner and Complete

Carty Reserve Walk Trail (*Completion Partnership Project*): assistance with the completion of a project currently underway, parking and signage is required to build upon the trail construction and interpretation work. There would also be an opportunity to create a loop trail and car-park area. **Estimated Project Cost: \$13,280**

6.4 Mountain Bike Trail – Feasibility Study

Consideration of the construction of a long distance mountain bike trail, possibly passing through the Shire of Toodyay and the City of Swan. The Avon Valley National Park is located primarily within Toodyay and Swan meaning it is on the Shire of Chittering's 'back doorstep'. The success of the Munda Biddi Trail and other mountain biking trails has prompted a surge in mountain biking activity. **Estimated Project Cost: \$22,000**

Note: as a ballpark figure Paul Neve has offered the following information;

- to design and construct a metre wide trail could be about \$2,500 per 100 metres..
- A recently constructed Mountain Bike Trail Park with a 4km trail, skills ride area, two dirt jump lines and pump track was costed at \$185,700.

6.5 Wannamal Heritage Trail – Partner and Enhance

Wannamal Heritage Trail (*Enhancement Partnership Project*): enhancement of the existing heritage trail in partnership with the local community, by designing, producing and installing interpretive panels along with 'standard' trail directional markers. Consideration could be given to creating a shorter 800m loop trail within the existing trail to offer a more appealing distance to tempt 'drive-by' tourists to stop and wander. **Estimated Project Cost: \$25,275**

6.6 Summary of Project Costs

These figures are estimates only and will be subject to confirmation prior to project commencement. They are provided as indicative costs for the purposes of funding applications and budgeting. With community partnerships and successful funding application the costs may be reduced.

Project Cost	Cost	In-kind	Total
Bindoon Townsite Heritage Walk	\$ 14,750	\$ 7,790	\$ 22,540
Blackboy Ridge Enhancement	\$ 29,625	\$ 4,070	\$ 33,695
Carty Reserve Walk Trail	\$ 11,880	\$ 1,400	\$ 13,280
Mountain Bike Trail/Park Plan	\$ 22,000	-	\$ 22,000
Wannamal Trail Enhancement	\$ 20,940	\$ 4,335	\$ 25,275
Total	\$ 99,195	\$ 17,595	\$116,790

An additional \$9,314 would need to be considered for maintenance, please refer to Attachment 3.

Section 7: Implementation Program

7.1 Timeframe for Implementation

As with the original draft this Chittering Trails Network Master Plan has deliberately been kept simple with a limited number of projects to ensure that it is not too daunting and therefore achievable.

Each project can 'stand-alone' and whilst each would deliver benefits to the Shire of Chittering, the entire set of projects would be more likely to be able to attract new visitors to the Shire.

The implementation program (see below) is designed to be undertaken with an average annual Council budget allocation of \$18,684 over a ten year period. Having said that, should outside funding be gained, all of the proposed projects could be completed in a shorter timeframe which would be more beneficial to the Shire.

7.2 Chittering Trails Master Plan Implementation

Year	1 2013/ 14	2 2014/ 15	3 2015/ 16	4 2016/ 17	5 2017/ 18	6 2018/ 19	7 2019/ 20	8 2020/ 21	9 2021/ 22	10 2022/ 23
Bindoon Heritage Walk										
Blackboy Ridge Enhancement										
Carty Reserve Walk Trail										
Mountain Bike Trail/Park Plan										
Wannamal Trail Enhancement										

SECTION 8: ENVIRONMENTAL AND CULTURAL ISSUES

8.1 Trail Construction and Hygiene

As stated in the original draft "It should be noted that standard hygiene measures should be used during construction and maintenance of the trail network to ensure that dieback (*Phytophthora cinnamomi*) is not inadvertently spread. Dieback is a colourless microbe known to science as *Phytophthora cinnamomi*. It is infamous worldwide for its capacity to invade and destroy the function of the root systems of an extraordinary range of plants. The impact of this now widespread pathogen, believed by many to have been first introduced to Western Australia at or soon after European settlement in 1828, varies greatly across the landscape. The presence of dieback in native vegetation may lead to near complete elimination of complex communities. The destruction caused in centres of great plant diversity such as the Stirling Range National Park in Western Australia is so severe that the epidemic has been described as a biological tragedy of global significance.

In warm and wet weather *P. cinnamomi* has the ability to produce large numbers of infective motile spores that move autonomously in saturated soil from one host plant to another. In addition, the pathogen may be carried by waterflow and with soil moved by a variety of factors including vehicles and earth moving machinery, animals and bushwalkers. Thus its distribution is strongly related to watercourses, tracks and roads, and infestation is most common where there is frequent traffic. Consequently, great care will need to be taken to ensure that any contractors, and volunteers,

working on trail construction or other projects are well acquainted with appropriate preventative techniques.”

8.2 Rare Flora

As stated in the original draft *“The Shire of Chittering is renowned for its diversity of flora, as set out in the Wildflowers of Chittering booklet. Care will be needed when selecting an alignment for walk trails to ensure wildflowers are not destroyed. Similarly, when new lay-bys are being developed for the drive trails, care must be taken to ensure that rare flora does not occur in the vicinity of the construction activity. DEC and botanists should be included on the team responsible for selecting walk trail routes (or re-aligned trail routes) through such areas as the Avon Valley National Park and Blackboy Ridge to ensure that the trail is aligned well away from any sensitive areas.”*

8.3 Aboriginal Heritage Act

As stated in the original draft *“Section 18 of the Aboriginal Heritage Act provides the mechanism to seek the consent of the Minister for Indigenous Affairs to use, for a purpose, the land upon which an Aboriginal site exists or might exist. The Aboriginal Heritage Act also establishes the Aboriginal Cultural Material Committee. Its functions include considering applications under section 18 of the Act by owners of land to use land on which Aboriginal sites or objects are located and recommending to the Minister for Indigenous Affairs whether consent should be given to the use of the land for the purpose sought. Consultation during the preparation of this Trails Master Plan has indicated that the proposal for a boardwalk across Lake Needoonga stalled as it was thought likely that an application under s18 of the Act might be required, to seek consent for its development. It would be prudent when developing any new trails, as recommended in this Plan, to refer proposals to the ACMC.”*

SECTION 9: INTERPRETATION

9.1 Interpretation Signage on Trails

As stated in the original draft *“Interpretation is the key to the success or failure of many trails. Trails can be regarded as merely the vehicle for telling stories - for educating and entertaining people. For the business of delivering 'edu-tainment'. On-trail interpretation is becoming more and more of a feature of trails built in recent times. When well done, interpretive signage can add significantly to the richness and depth of the user's experience. It can also generate a sizeable cost, and can be subject to ongoing vandalism in rural and remote areas. Care will need to be taken in a base-line decision about what on-trail interpretation is provided, and in choosing a style of signage with a reputation for withstanding both graffiti and vandalism. Anodised aluminium may be a good option, as it is sturdy and enables easy graffiti removal.*

The unique and varied flora, fauna and landscape of the Shire of Chittering, its history of exploration and settlement, historic and contemporary agricultural enterprises, and characters of the area (past and present) are just a few of the themes that could be developed along the trails. The quality of interpretation is often the key to the success - or failure - of trail projects. While some trails can rely upon the natural beauty for attracting visitors, most trails rely heavily on good quality interpretation to be successful and well used.”

As stated in the original draft *“The definition provided by Freeman Tilden in his classic book, Interpreting Our Heritage, is regarded by most interpreters as the definition of the art:*

"Interpretation forges emotional and intellectual connections between the interests of the audience and the inherent meanings in the resource." (Freeman Tilden, Interpreting Our Heritage, 1957)

Interpretation reveals the meanings and relationships of our cultural and natural heritage to visitors, through first hand experiences with objects, artefacts, landscapes, and sites. Every aspect of our heritage has a story to be told. Heritage interpretation tells the tales of the land, past activities and land uses, its people, animals and plants, and in the telling, helps people form connections with our

heritage. The history of exploration, settlement and farming of the Chittering Valley, and the successive waves of people who have lived and/or worked in the area, have a vast multitude of stories waiting to be told.

Visitors want to learn, see, and do! They travel to heritage sites and tourist areas for a mix of memorable educational experiences that are at the same time fun or entertaining - in short, they want "edu-tainment". For most moderate to small heritage sites and trails, providing outstanding interpretive programs and services, and having a good interpretive plan will be required for their long-term success. It is in the interpretation of the sites' stories to visitors where the "heritage" of a site is brought to light. Interpretation makes the site come to life for the visitors, giving the site relevance and importance. It reveals to visitors, in powerful and memorable ways, the differences between "old" and historic.

What will make the trails of Shire of Chittering popular attractions will be the quality of the interpretive material, and the manner in which that interpretive material is presented and delivered. The trail interpretive material will encourage interaction and immersion, thus providing a far more rewarding learning experience.

9.1.1 Bindoon Townsite Heritage Trail

- Recreation
- Schools of the district
- Soldier settlement
- The history and role of local government
- The history of Bindoon – past and present
- The surrounding land uses, and changes over the years
- Trade, commerce and industry
- Transport and communications

9.1.2 Blackboy Ridge Walk Trail

- Birds of the reserve
- Exploration and settlement of the Chittering Valley
- Fauna of the reserve
- Flora of the reserve
- Indigenous history of the area
- The changing landscape (changing agricultural practices: orchards, vineyards – could be at the lookout)
- The impacts of fire
- Trees of the reserve
- Wildflowers of the reserve

9.1.3 Lake Needoonga Project

- Aboriginal significance of the wetlands
- Birds of the lake
- Fish and other creatures of the water
- Fringing vegetation
- Impacts on the lakes of encroaching urban development
- Maintenance of the water level
- Mechanics of maintaining water levels in the Chittering Lakes

- Wetland vegetation

9.1.4 Wannamal Heritage Trail

Interpretive panels for 20 of the 26 sites featured in the “Wannamal Walk Trail” brochure, with the panels to include historic photos and/or sketches, anecdotes, quotes and factual information pertaining to each site.

9.1.5 Drive Trail

- Changes in farming practices over the years
- Changes in social structure: loss of small schools; decline in towns; population shift (to bigger towns); amalgamation of farms; farmers sons don’t return to farm after school, etc)
- Changes in transport practices (road and rail); storage trends
- Explorers / settlers / pioneers of the region/district
- First farms / first harvests
- Importance of remnant vegetation: roadside vegetation; Nature/Flora Reserves
- Parking for taking photographs and reading interpretive signage needs to be considered.
- Pests: rabbits; foxes, etc
- Salinity; landcare; bushcare
- Sculptures along trail – existing and planned
- Sheep numbers and trends
- Yields; area under cultivation

SECTION 10: TRAIL DEVELOPMENT CONSIDERATIONS

10.1 General Considerations

The following information is provided as a backdrop for the trails construction and upgrading program described elsewhere in this Plan. In consideration of the expertise of Mike Maher the following is as per the original draft:

10.1.1 One-Way System

To maximise enjoyment of the trails and enhance safety and trail user's experience without the fear of continual conflict with other users, it is recommended that where possible and appropriate the trails be one-way. This will require on-trail signage and trail marking to be appropriately located . The trail maps and brochures will also need to be annotated to encourage one-way use of the trails.

10.1.2 Trail Width and Height

Walk trails in the locations proposed should have a maximum trail width of 1.5 metres on those sections where a purpose-built trail is required. In some sections however, the surface will be wider, as it will follow existing vehicle tracks. On trails only to be used only for walking (where horse riding and mountain biking are to be excluded) height clearance should be around 2.5 metres. Pruning of overhanging branches should occur where necessary to enable safe passage without the need for stooping under branches.

10.1.3 Trail Surface Material

A smooth natural earth surface is most appropriate for the proposed trails in the Shire of Chittering. The existing earth surface should be firm enough in most locations to provide pleasant walking conditions, and should be pleasing to the eye of walkers. Some short sections of existing trails require additional fill material, especially where the trail alignment is steep and is subject to erosion. These areas are not extensive.

10.1.4 Erosion Control and Water Crossings

Proper drainage is of considerable importance in constructing a lasting, maintenance-free facility. Water should be removed from trail surfaces as fast as possible, wherever possible. The steepness of some of the trails and the type of soil dictate individual site requirements for the frequency of draining water from the trail. In this case, given the relative steepness of some of the terrain (particularly on the Blackboy Ridge and Avon Valley National Park trails), erosion control should receive some attention. Steps and/or water bars and side drains are recommended.

10.1.5 Trail Furniture

Several of the proposed trails, being in an area with extremely scenic viewpoints and interesting outlooks, have a number of locations well suited to the placement of trailside furniture which benefit all trail users. The proposed furniture comprises, seats in appropriate and attractive locations; trailhead infrastructure, including seats and/or picnic table, signage and other facilities; timber seats and tables are aesthetically more pleasing and blend in natural areas, such as Blackboy Ridge and the Avon Valley National Park.

10.2 Safety Considerations

The most significant safety issue is that which relates to possible conflicts between different types of trail users – legal and illegal - for example, walkers and trail bikes or 4WD's, or cyclists and walkers. Effective signage will greatly limit this potential problem. The incidence of conflict with mountain bikers and horse riders is likely to be low, given their low usage levels. Greatest conflict will occur with motorised users, such as trail bikes.

SECTION 11: MARKETING, PROMOTION AND SIGNAGE

The collation, design, production and dissemination of clear, concise, coordinated information regarding the range of walk trails and / or walking opportunities available within the Shire of Chittering is imperative. Following an existing signage and publication audit marketing would be designed to take advantage of the existing Drive Trails, which recognise the widespread nature of the Shire's attractions and the need to link the walk trails. Consultation would need to be undertaken with the 'owners' of existing publications, such as Wendy Gellard (Peace Be Still), the Wannamal Community, the Chittering Tourist Association, Landcare, Northern Valleys News and the Northern Valleys Directory. Consideration would be given to a dedicated web-page along with mobile phone 'apps'.

The idea will be to prepare a series of A4 Trail Notes named "Chit Chat", which are then housed within a presentation folder. This allows for individual updates and additions without the need to reprint an entire brochure.

As identified in the original draft "the Chittering Trails Network 'experience' should be consistently promoted to ensure that it becomes well recognised. The 'experience' will relate to the Shire's built heritage (historic sites and other historic buildings), natural heritage (DEC and reserves) and other offerings such as the vineyards, orchards and local businesses.

In addition, it is desirable that the recreational and natural areas of the Shire be linked by means of designated drive trails. The Chittering Trails Network Master Plan provides ideas for the ways in which existing and future trails, and the heritage and natural areas of the Shire might be linked by means of drive trails and how these could also be linked with regional attractions or adjoining shire attractions."

With this in mind the following selected walk trails would be those marketed under the Chittering Trails Network banner, each with their own A4 "ChitChat Trail Note" and complementary signage;

- Blackboy Ridge Northern Lookout – 1,500m trail (3,000m return)

- Carty Reserve Walk Trail – 300m trail (600m return)
- Lake Needoonga Walk Trail – 620m trail (1,240m return)
- Spoonbill Lake Walk – 800m trail (1,600m return)
- Stonehouse Trail – 1,500m trail (3,000m return)
- Wannamal Heritage Walk Trail – 3,200m loop

Plus

- Peace Be Still Trails – a series of 8 trails emanating from Peace Be Still ranging from 20 minutes return to 3 hours return / 600m return to 13.5km return.

Natural Reserve Walking Opportunities: the reserves below could be included within the overall promotion, but would not have “ChitChat Trail notes” as the Shire is not in control of maintenance / signage and currently both require maintenance / design / construction and/or signage.

- Burroloo Well Reserve – 800m loop trail *need to check with DEC, needs maintenance
- Udamung Reserve – nil trail *need to check with DEC, needs signage.

Public Open Space Walking Opportunities: the area below would not be suitable for promotion to the public.

- Country Club Estate – this series of fifteen open space corridors for use by local walkers could be undertaken as a separate project. The local walking group/s require assistance with the naming and signing of the existing open space corridors currently utilised for walking

It is suggested that a main Drive Trail is marketed that links the Chittering Valley Tourist Way, with the Chittering Valley Wine Trail, the ‘expanded’ Chittering Sculpture Trail and touches on Discovering Golden Horizons, as well as linking with local Flora Roads – Blue Plains, Maddern, Spillman and Reserve – and other attractions.

As per the cost estimates detailed in Attachment 3, a separate amount of approximately \$50,000 would need to be considered for the marketing and promotion of the trails. All trails should be brought to the desired standard before extensive marketing occurs.

11.1 The Importance of Signage

As noted in the original draft *“Signage is another important facet of the Chittering Shire trails network where improvements could occur. During fieldwork it was noted that few directional markers exist along trails, and trail-head signage was basic – if present at all (except for trails emanating from the Peace Be Still property). Few, if any, ‘promotional’ signs exist. Those that did were not as prominent as they should be”*. During the trail walks and drives undertaken for the audit of the original draft it was observed that much of the signage is outdated.

The proposed signage audit will address this issue.

11.2 Directional Signage

Will be as per DEC specifications, as per Gil Field’s advice, with signs costed at approximately \$500 each. This signage will include, where possible and appropriate, notation of available facilities.

11.3 Trailhead Signage

Will be as per DEC specifications, as per Gil Field’s advice, with signs costed at approximately \$1,500 each. This signage will include mapping and other site information.

11.4 Interpretive Panels

Will be as per DEC specifications, as per Gil Field’s advice, with signs costed at approximately \$750 each. This signage will highlight natural and historical items along the trail.

11.5 Trail Markers

Will be as per DEC specifications, as per Gil Field’s advice, with signs costed at \$25 each.

11.6 Warning Signage

Will be as per DEC specifications, as per Gil Field's advice, with signs costed at \$25 each.

SECTION 12: TRAIL MAINTENANCE AND VISITOR RISK MANAGEMENT

12.1 Trail Maintenance

As stated in the original draft *"Ongoing trail maintenance is a crucial component of an effective management program – yet it is often neglected until too late. Countless quality trails have literally disappeared because no one planned a maintenance program and no one wanted to fund even essential ongoing repairs. It is therefore essential that funds be set aside in yearly budgets for maintenance of these trails - to ensure user safety and enjoyment, and to minimise liability risks for land managers. Depending on a swathe of conditions – weather, soil types, construction standards, usage patterns and more – trail maintenance can cost up to 10% of total construction costs – or more - every year. This can be a daunting prospect, particularly for cash-strapped Government Departments, Local Governments and not-for-profit community organisations."*

Erosion (caused by weather and unauthorised users), regrowth of vegetation, fallen trees and branches and damage to signage are likely to be the greatest maintenance activities on the trails. The plan needs to include not only the replacement of damaged facilities but also preventative maintenance and the replacement of worn out facilities. Providing these effects are attended to early, they are largely labour intensive rather than capital expensive. Calamitous events such as fire or flood will naturally generate significant rebuilding activity and consequent costs. These events are generally unmanageable, and should simply be accepted as part of the longer-term reality of a trails program."

12.1.1 Goals of a Trail Maintenance Plan

- Ensure that trail users continue to experience safe and enjoyable conditions;
- Guard against the deterioration of trail infrastructure, thereby maintaining the investment made on behalf of the community;
- Minimise the trail manager's exposure to potential public liability claims arising from incidents which may occur along the trails; and
- Set in place a management process to cover most foreseeable risks.

12.1.2 Trail Maintenance Activities Table

The six identified trails represent a total distance of 7,920m.

The three Shire managed trails are;

- Blackboy Ridge Northern Lookout – 1,500m trail
- Carty Reserve Walk Trail – 300m trail
- Spoonbill Lake Walk – 800m trail

With maintenance costs estimated at \$7 per metre this would total to an annual maintenance allocation of \$18,200. Once the Bindoon Townsite Heritage Trail is in place there will be minimal trail maintenance costs as it will be predominantly based on existing footpaths.

The 3,200m Wannamal Heritage Walk Trail is managed by the local community, however consideration should be given to assisting with the maintenance of this trail.

The Lake Needoonga Walk Trail (620m) and Stonehouse Trail (1,500m) are DEC managed trails.

Trail maintenance should include the following activities, to be undertaken annually prior to the Spring visitor influx (August);

Activity
Undertake full inspection of all trails – including signage.
Cut-back overhanging or intruding vegetation.
Sweep or rake debris from trail surfaces, especially at road crossing points.
Check condition of trail surface for erosion or other damage and arrange repairs if necessary. Arrange repairs immediately if erosion is acute, or schedule maintenance if not; rake-hoe regrowth vegetation.
Check structural stability of built structures such as bird hides, viewing platforms, boardwalks, interpretive signage, interpretive shelters
Prepare Hazard Inspection Report for Council

12.2 Trail Visitor Risk Management

Please refer to Attachment 6, a proposed policy which would be adopted separately to the endorsement of this Plan.

SECTION 13: RESOURCES AND FUNDING OPPORTUNITIES

13.1 Introduction

As stated in the original draft *“Resourcing trail construction and promotion programs can be challenging, as can resourcing ongoing maintenance requirements. It must be recognised that a Trails Master Plan such as this, and the individual projects it contains, are an investment in the future. Well planned and built, well interpreted and appropriately promoted, the trail projects will bring tourists and money into the Shire of Chittering. They will stimulate the creation of jobs, and will significantly assist in the conservation and preservation of heritage (natural and cultural) throughout this area. The trail projects outlined will also benefit local communities in a range of ways already elucidated.”*

Following is a list of potential current funding sources, it would be imagined that other sources would come to light once investigations progress in earnest.

13.2 Funding Programs

Funding Body / Program Name	\$\$\$ Available	\$\$\$ Required	Closing Date for Next Round
Country ARTS WA -Regional Arts Fund	Up to \$20,000	Not stated.	Closed September 2012 for 2013 projects.
Country Pathways Grants Scheme	No details on site		Closed for 2012.
Indigenous Heritage Programme	\$100,000	\$0	2012-13 closed, watch site for 2013-14.
Lotterywest - Interpretation Grants	Not specified.		Closed July 2012, watch site for 2013.
Regional Development Scheme (RDS) – Wheatbelt Development Commission	No details on site		Closed 2010-2011.
Tourism Quality Projects – TQUAL	\$15,000 to \$100,000	50%	Closed April 2012, watch site for 2013.
Trailswest (Department of Sport and Recreation) – Lotterywest Funding	<\$20,000 >\$20,000-\$100,000	\$0 50%	\$20,000 or less open all year \$20,000+ close 15 March 2013

13.3 Other Possible Funding Sources

13.3.1 Chittering Shire Council Contributions

Where matching contributions are required the Shire's annual budget allocation would be utilised along with in-kind contributions.

13.3.2 Corporate Sponsors

As stated in the original draft *"Many large companies have formalised sponsorship programs if benefits can be proven. Essentially any company with an operation within the region could be considered as a potential sponsor."*

13.3.3 Green Corps

As stated in the original draft *"Federally funded "Young Australians for the Environment" program. A 'major project' provides a host partner agency with 10 'trainees' and a supervisor for 14 weeks within a 26 week program. All materials, tools and technical supervision to be provided, as is accommodation and some other basic requirements."*

13.3.4 Work-for-the-Dole

As stated in the original draft *"Schemes to provide meaningful work experience and some training for long-term unemployed. Program generally only supplies 'labour' – host agency responsible for tools, materials, technical supervision etc."*

13.3.5 Volunteers

As stated in the original draft *"Many trails are only built – and then kept alive – by volunteer input. Either establish a specific local 'Trail Volunteers' or 'Friends of...' group, or tap into existing community organisations such as service clubs, progress associations, schools, scouts etc."*

The local Men's Shed has already expressed an interest in assisting with projects related with the trails, for example making and installing brochure boxes.

13.3.6 Conservation Volunteers Australia (CVA)

As stated in the original draft *"The Trust provides small crews of volunteers, with a supervisor, to undertake environmental activities. Teams of between five and eight people work for one to two weeks. An administration fee is imposed by CVA. Materials, tools and technical supervision need to be provided by the host agency. CVA have been involved in trails project elsewhere in Australia."*

13.3.7 Prison Crews

As stated in the original draft *"Crews of minimum security inmates have worked extensively in trail construction in Western Australia in the last ten years. This has proven a hugely beneficial program - to host agencies, to the Ministry of Justice and to the inmates themselves. A prison officer and transport is usually provided, but materials, tools, and technical supervision are required. In addition the Ministry may require host agencies to cover the Ministry's costs (staff etc)."*

13.3.8 Department of Environment and Conservation

As previously mentioned the DEC have offered assistance in the following areas;

- trail classification by offering to train Shire staff
- signage by supplying specifications
- promotion by supplying trail note layouts

SECTION 14: WHERE NEXT?

Should this draft Plan be endorsed by Council in December 2012 the recommendations within it will be undertaken over the coming years. Should external funding / sponsorship be gained the 10 year plan will be shortened accordingly.

SECTION 15: ATTACHMENTS

15.1 *Trail Inventory*

15.2 *Maps*

15.3 *Cost Estimates*

15.4 *Photographs*

15.5 *Signage Examples*

15.6 *Proposed Risk Management Guidelines*



Chittering Trails Network Master Plan 2013-2023

Trail Inventory

Chittering Trails Network Trail Inventory

	Trail Name	Location	User <u>W</u> alk <u>H</u> orse <u>B</u> ike	Land tenure	Trail Manager	1. Brochures / Web 2. Facilities 3. Interpretive Signage 4. Links 5. Road Signage	Condition	Length	Difficulty
Existing Walk, Horse and Bike Trails									
1	Blackboy Ridge Walk Trail	Blackboy Ridge Reserve, Chittering Road	W	Shire Res	Shire	1. Various, including 2 great specific handouts from Landcare, needs a weatherproof brochure box 2. Parking / picnic / toilets / lookout (needs upgrade) / views, possible opportunity for a wheelchair friendly trail. 3. Nil. Trail markers and interpretive signage required, signage at lookout concerning other tourism destinations in the Shire would be good 4. Part of Chittering Valley Tourist Way / near Julimar Strip 5. Yes, "toilets" needs to be added and additional signage at Great Northern Highway and Julimar Road intersections	Fair – there are also walking opportunities on fire access breaks, these need to be signed accordingly	1.5km - 45 min return	Narrow; steep in places; 120 steps (more required);

	Trail Name	Location	User <u>W</u> alk <u>H</u> orse <u>B</u> ike	Land tenure	Trail Manager	1. Brochures / Web 2. Facilities 3. Interpretive Signage 4. Links 5. Road Signage	Condition	Length	Difficulty
2	Burroloo Well Reserve Trail	Burroloo Well Nature Reserve, Great Northern Highway	W	Nat Res	DEC	1. Various 2. Parking, is an old well on the Reserve that could be 'featured' 3. Nil 4. On main road 5. Nil, currently not in a condition that would warrant advertising	Trail follows fire break around Reserve, fallen trees make it impassable about halfway around.	800m	Easy
3	Carty Reserve Walk Trail	Great Northern Highway, 8km south of Bindoon	W	Pub Rec	Shire	1. Various, if formalised this could be a good location for a brochure box 2. Has a picnic table, Shire could assist with parking area and "no camping" signs 3. Underway (Landcare), existing Tourism Sign board, needs updating 4. On main road, good for passing travellers 5. Nil – would be good	There is currently no formal trail at this location	302m (604m return)	Will be easy, flat area
4	Country Club Estate	Fifteen open space corridors throughout the subdivision	W,H	Reserve	Shire	The fifteen 'tracks' each need to be re-assessed. These are more 'local walking opportunities' than trails to be marketed to the general public.	Advice from current walkers is that the 'tracks' are in fairly good condition	Varies	Varies

	Trail Name	Location	User <u>W</u> alk <u>H</u> orse <u>B</u> ike	Land tenure	Trail Manager	1. Brochures / Web 2. Facilities 3. Interpretive Signage 4. Links 5. Road Signage	Condition	Length	Difficulty
5	Lake Needonga Walk Trail	Edmonds Place – opposite Clune Park, Bindoon	W,H,B	Nat Res	DEC	1. Various 2. Nil required 3. Both trail ends 4. Links shops to park, close to beginning of Stonehouse Trail 5. Nil – would be good	Well maintained	620m	Flat, wide; easy
6	Spoonbill Lake Walk	Chittering Heights	W, H	POS	Shire	1. Various 2. Parking, turnaround area, bin, picnic table 3. Nil – would be good 4. Close to Aquila Reserve which has play equipment 5. Shire signage, additional on Highway would be good	No formal trail; picnic table, lake views; revegetation. Could incorporate firebreak on other side of lake	1,600m return	Easy
7	Stonehouse Trail	Clune Road to Pioneer Road, Bindoon	W, H	Nat Res	DEC	1. Various 2. Nil required due to Clune Park being at the trail head 3. Additional interpretive signage would be good 4. End = Pioneer Rd (no paths), also a link to the Lake Needonga Trail across the lake with a boardwalk to form a loop would be good, could also be extended through to Brockman Centre 5. Nil – would be good	Excellent	45 min return / wide /	Easy, slight incline to Pioneer Road, steeper if returning via road

	Trail Name	Location	User <u>W</u> alk <u>H</u> orse <u>B</u> ike	Land tenure	Trail Manager	1. Brochures / Web 2. Facilities 3. Interpretive Signage 4. Links 5. Road Signage	Condition	Length	Difficulty
8	Udamung Reserve	AKA Hay Flat Reserve	W	Nat Res	DEC	1. Various 2. Nil 3. Interesting vegetation could have signage 4. Close to Great Northern Highway at one end, would be good 'pull-off' area 5. Nil – would be good	Needs maintenance, no defined trail	To be determined	Easy, slight upward slope
9	Wannamal Heritage Walk Trail	Wannamal townsite	W	Road res; Shire res	Locals	1. Fantastic brochure created by local community 2. Trailhead parking 3. Has trailhead signage and site numbers, but additional posts with directional markers and interpretive signage onsite would enliven the current experience. 4. Is on the route between Bindoon and Moora 5. Nil – would be good	Excellent, combination of road / tracks	3.2km	Easy, but requires road walking

'Private' Trails Open to the Public									
	Camino Salvado Pilgrim Trail	Subiaco to New Norcia	W	Various	Various	www.caminosalvado.com/		145km 6 days	
	Garden of Gethsemane	Avon Valley National Park Trail and Peace Be Still	W	Private; Nat Park	DEC; Peace Be Still	Peace Be Still handout/map Trailhead parking – yes Directional Markers – yes Interpretive panels – minimal Trailhead signage – yes	The Peace Be Still walk trails are maintained by the property owner with cooperation from the DEC. They are all in fairly good to good condition.	20 mins return	The walks are mainly 'Moderate', with some steep hills
	Harry Butler Trail	Avon Valley National Park Trail and Peace Be Still	W	Private; Nat Park	DEC; Peace Be Still	Peace Be Still handout/map Trailhead parking – yes Directional Markers – yes Interpretive panels – minimal Trailhead signage – yes		20 mins return	
	Mill Walk	Peace Be Still	W	Private	Peace Be Still	Peace Be Still handout/map Trailhead parking – yes Directional Markers – yes Interpretive panels – minimal Trailhead signage – yes		13.5km	
	Out and Back Trail	Avon Valley National Park Trail and Peace Be Still	W	Private; Nat Park	DEC; Peace Be Still	Peace Be Still handout Trailhead parking – yes Directional Markers – yes Interpretive panels – yes Trailhead signage – yes		6.5 km	
	Over The Hill	Avon Valley National Park Trail and Peace Be Still	W	Private; Nat Park	DEC; Peace Be Still	Peace Be Still handout/map Trailhead parking – yes Directional Markers – yes Interpretive panels – minimal Trailhead signage – yes		1 hour return	

Ridge Top Circle	Avon Valley National Park Trail and Peace Be Still	W	Private; Nat Park	DEC; Peace Be Still	Peace Be Still handout/map Trailhead parking – yes Directional Markers – yes Interpretive panels – minimal Trailhead signage – yes	3 hours return
River Camp	Avon Valley National Park Trail and Peace Be Still	W	Private; Nat Park	DEC; Peace Be Still	Peace Be Still handout/map Trailhead parking – yes Directional Markers – yes Interpretive panels – minimal Trailhead signage – yes	3 hours return
Special Valley Walk	Peace Be Still	W	Private	Peace Be Still	Peace Be Still handout/map Trailhead parking – yes Directional Markers – yes Interpretive panels – yes Trailhead signage – yes	1 km 20 mins return
Stations of the Cross	Avon Valley National Park Trail and Peace Be Still	W	Private; Nat Park	DEC; Peace Be Still	Peace Be Still handout/map Trailhead parking – yes Directional Markers – yes Interpretive panels – minimal Trailhead signage – yes	1 hour return
To The Park	Avon Valley National Park Trail and Peace Be Still	W	Private; Nat Park	DEC; Peace Be Still	Peace Be Still handout/map Trailhead parking – yes Directional Markers – yes Interpretive panels – minimal Trailhead signage – yes	2 hours return
Valley Views Walk Trail	Avon Valley National Park Peace Be Still	W	Private; Nat Park	DEC; Peace Be Still	Peace Be Still handout/map Trailhead parking – yes Directional Markers – yes Interpretive panels – minimal Trailhead signage – yes	9.8km

Valley Views 2, also known as Yozzi Road and Kyotmunga Walk Trail	Avon Valley National Park (between Chittering Rd / Chittering Valley Rd – off Yozzi Road) and Peace Be Still	W	Private; Nat Park	DEC; Peace Be Still	Peace Be Still handout Trailhead parking – yes Directional Markers –yes Interpretive panels – yes Trailhead signage – yes *Culvert and bridge installed.	7.1km
Proposed Trails						
'Stonehouse' Boardwalk and Bird Hide	Stonehouse Trail to Lake Needonga Trail. As per Lake Needonga Trail Development Plan		To create a loop walk trail to encourage usage of townsite. Possibly approach WDC / Nationals to assist with funding			
'Brockman' Trail	From Stonehouse Trail to Brockman Centre. As per Lake Needonga Trail Development Plan		To create a link between the Brockman Centre, the townsite and the Country Club Estate. Approximately 10km return.			



Chittering Trails Network Master Plan 2013-2023

Trail Mapping

Existing Trails – highlighted green
Proposed Trails – highlighted blue
Drive Trails – highlighted orange
Walking Opportunities – highlighted yellow

WANNAMAL:

Wander around the townsite on the 1.5km heritage trail.
Brochures at Rest Area.

**** COUNTRY CLUB ESTATE****LAKE NEEDONGA.**

From Edmonds Place (off Great Northern Highway) along banks of Lake Needonga finishing at Clune Road off Gray Road. signage

STONEHOUSE TRAIL

From Clune Road, near Clune Park, signed, 45 minute return lakeside walk, can be linked with Lake Needonga Trail.

BINDOON Spoonbill Lakes

Signed public open space in Lake vicinity to Hart Drive and south and adjacent and west of Great Northern H'Way to Burroloo boundary.

CARTY RESERVE

Entry from Great Northern Highway Parking area, easy walk within a public recreation area... see how the 2012 revegetation project is progressing.

BURROLOO RESERVE

Entrance south of DEC reserve through posted entrance 30min

BLACKBOY RIDGE

Narrow 1.5km trail north of picnic area. Pretty spring walk with display of wildflowers to lookout.

Julimar Rd

To Julimar Strip

Keating Rd

Chittering Valley Rd

AVON VALLEY WALK TRAIL

VV2 from Yozzi Rd to Peace Be Still 2 1/2 hours one way (carpark at Yozzi Rd) Signage 7.1km

PEACE BE STILL / DEC

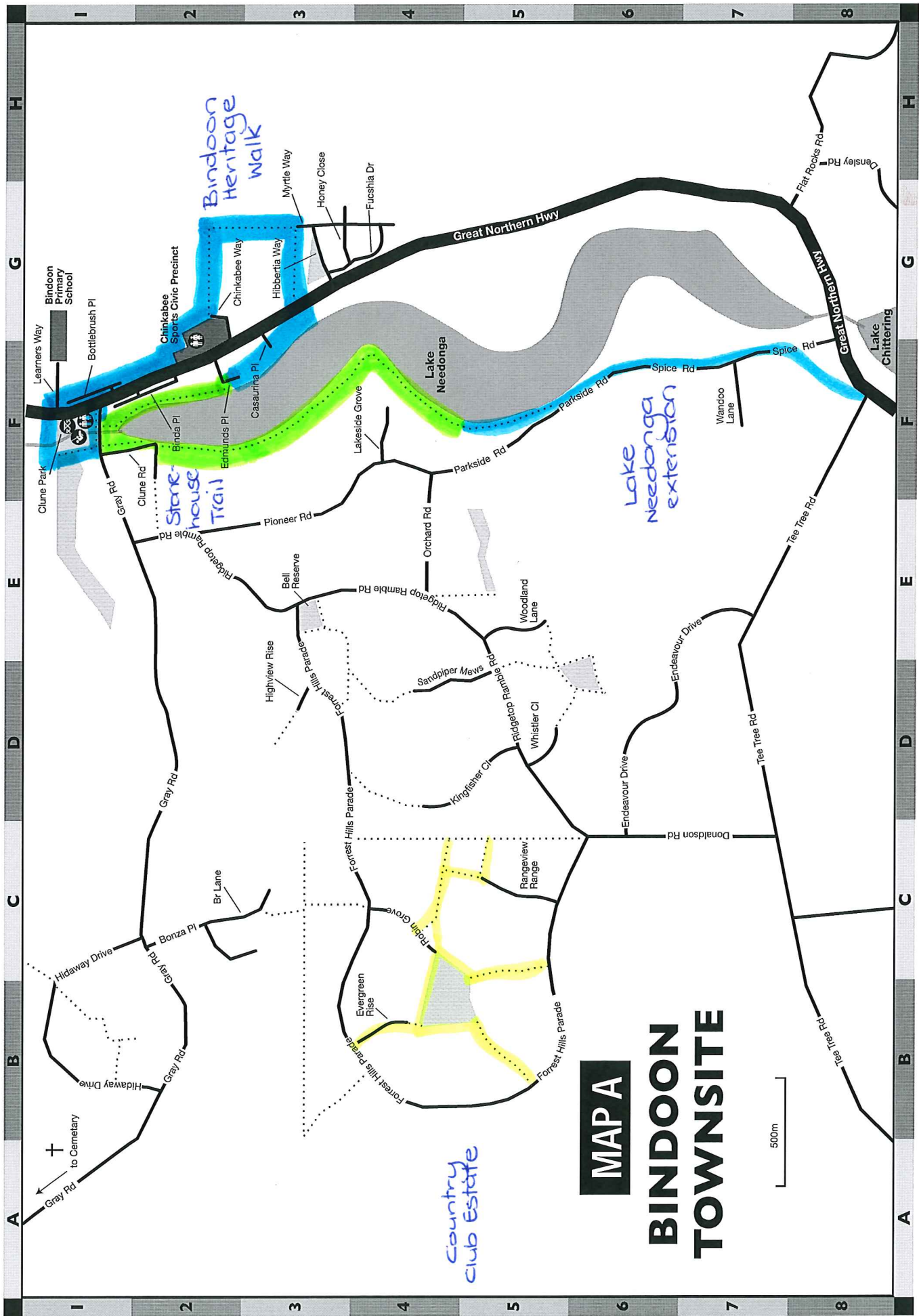
PEACE BE STILL/AVON VALLEY NATIONAL PARK

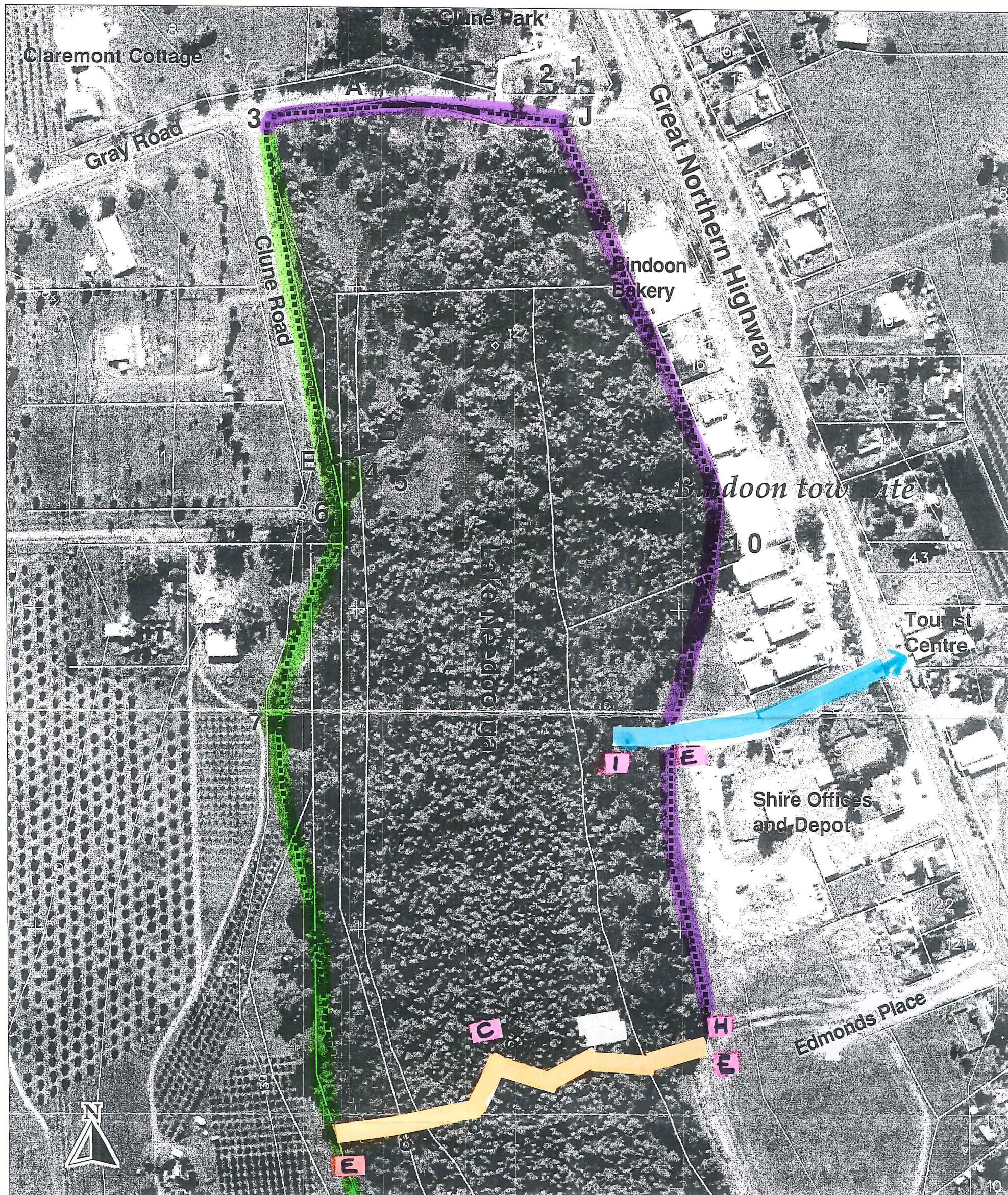
signs throughout From car park—sign at entrance
Special Valley 20min return from Guest House 1km
Ridgetop Circle 2 hours
Out & Back (to Park) 3 hours Booklet on plant details on sale at Guest House 6.5km
Harry Butler Trail 20 minutes
Stations of Cross 1 hour
Labyrinth 20 minutes

From Peace Be Still car park—sign to south of Guest House
On walk track. Maps from Guest House
Extension of existing walks—marked by poles with initials.
VV Valley views—extension of Out & Back, circling back through bush 4 hours 9.6km
RC River Camp To Avon River—4 hours one way 2

SHIRE OF CHITTERING WALK TRAILS

Northern Valleys townsite maps





links to Pioneer Due country Club Estate ← → Extend to Brockman Centre
LAKE NEEDOONGA TRAIL DEVELOPMENT PLAN
SHIRE OF CHITTERING

LEGEND

- Boardwalk - to connect loop
- 3.0 metre trail / firebreak
- Stonehouse Trail
- Bridges
- 1.8 metre trail
- Lake Needoonga walk + footpath
- Linking spur trails
- Trail infrastructure
- Interpretive panel
- "A"
- "1"



78 Gardner Street
 Como 6152
 Western Australia

MAHER BRAMPTON ASSOCIATES Recreation Trail Consultants

Providing professional assistance with all aspects of recreation trail planning, construction and management

Ph: (08) 9474 4655
 Fax: (08) 9474 4655
 Email: jessie@network.net.au

Trail & viewing platform, link to Townsite / footpath walk

Blackboy Ridge

Legend



wildflower stops BBR



BBR firebreaks



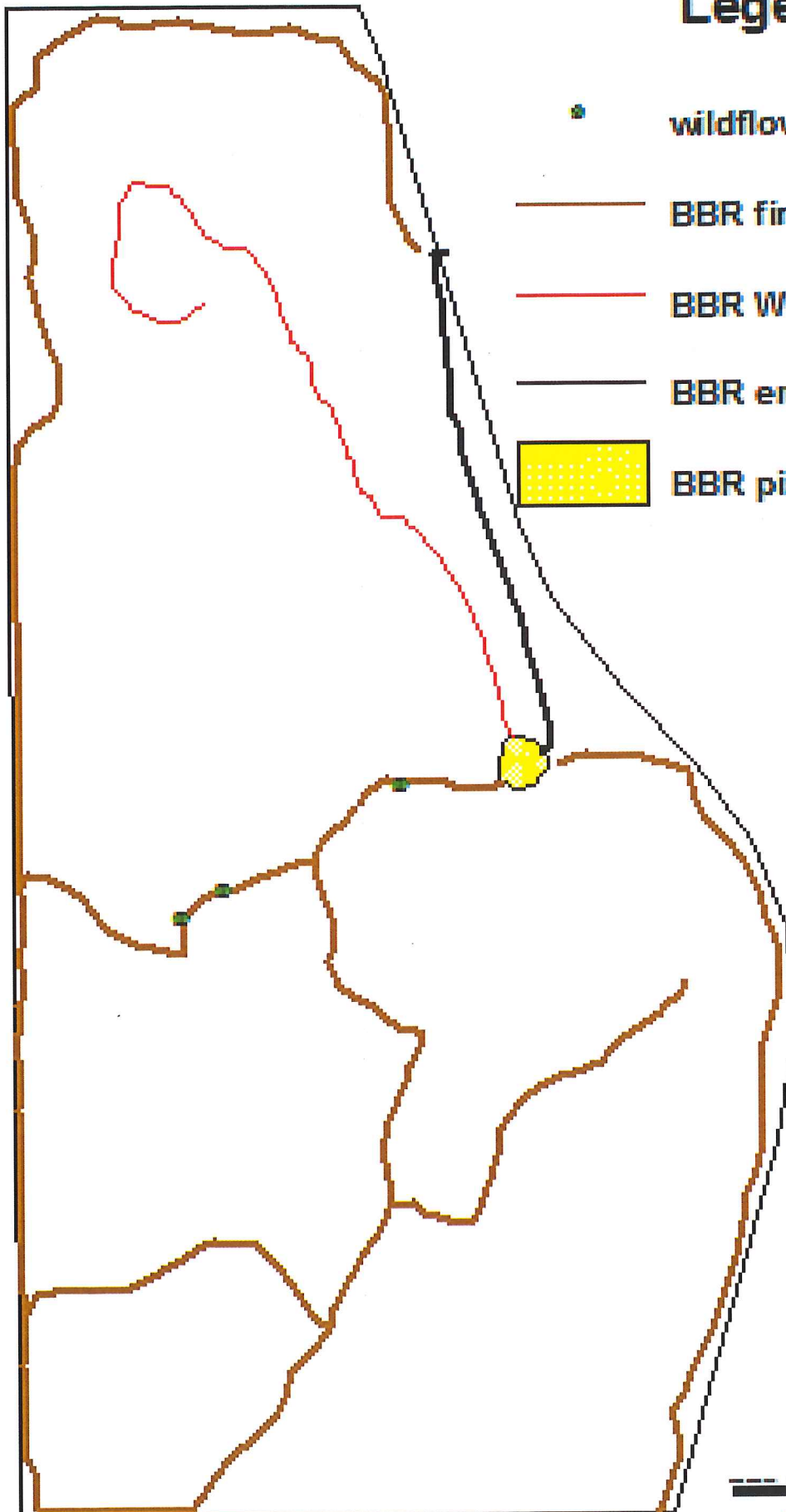
BBR Walk trail



BBR entry road

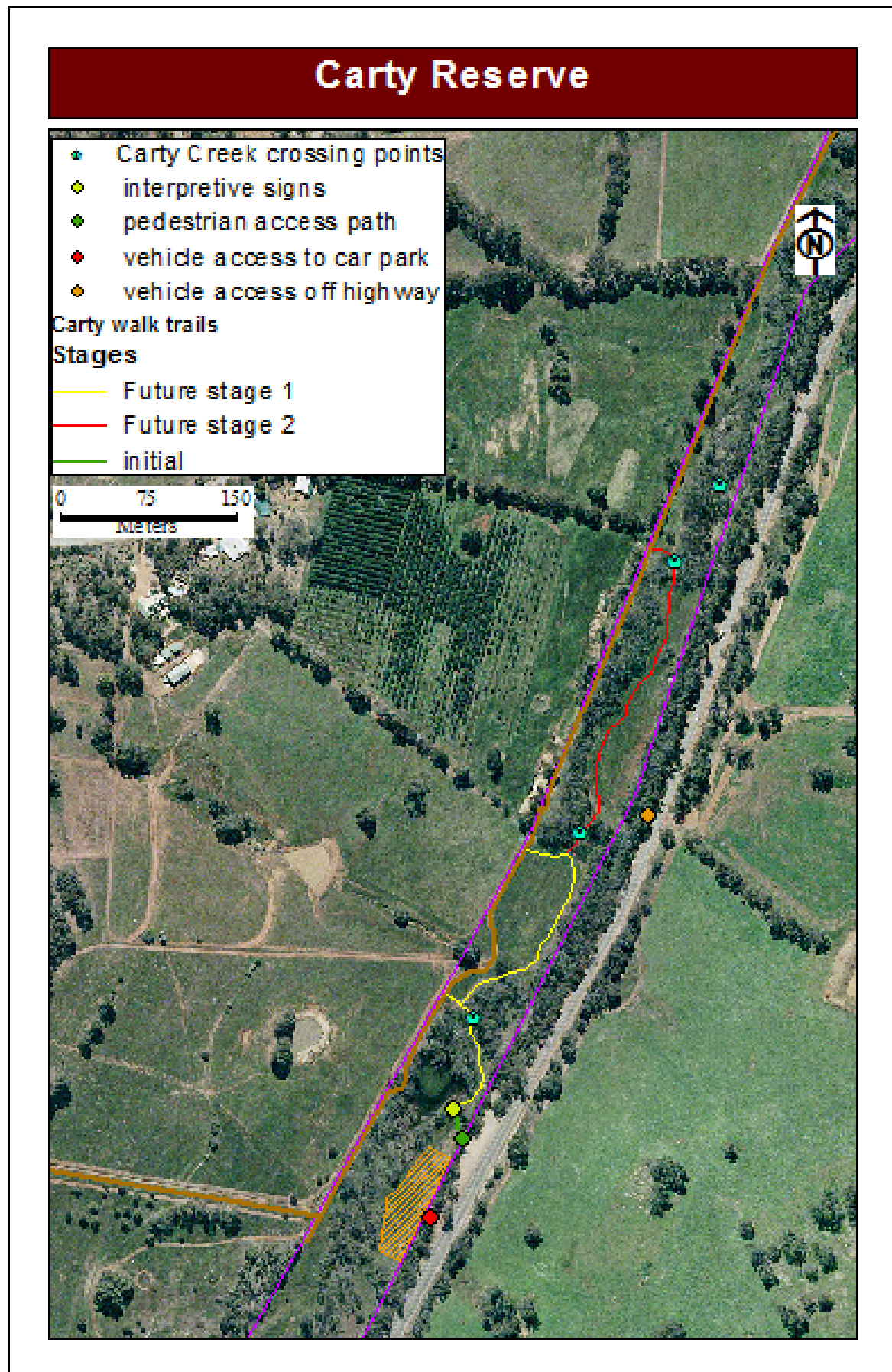


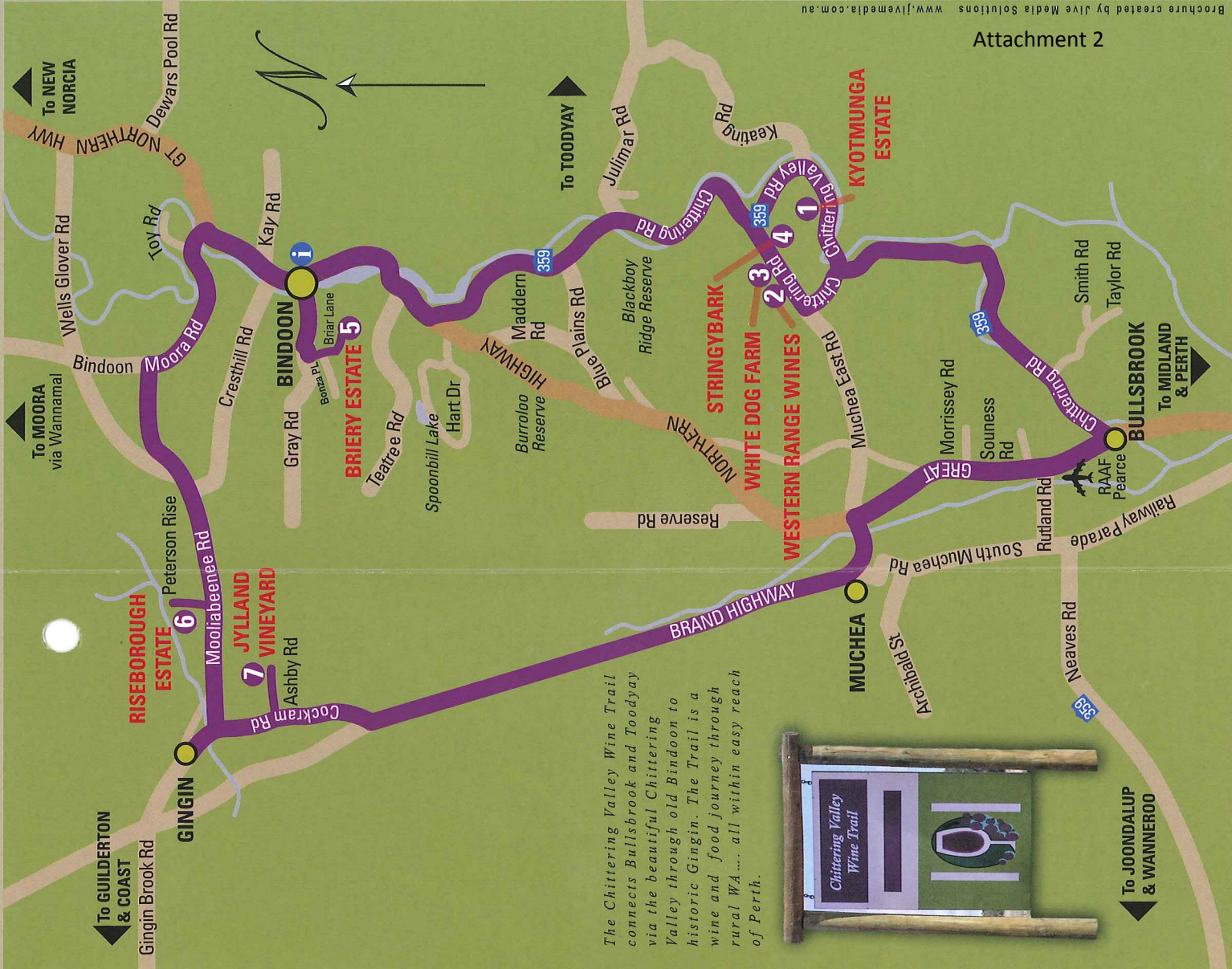
BBR picnic area



0 100m

— On a level in the center line —





The Chittering Valley Wine Trail connects Bullsbrook and Toodyay via the beautiful Chittering Valley through old Bindoon to historic Gingin. The Trail is a wine and food journey through rural WA... all within easy reach of Perth.

winery	map	REF	distance
 Kyotmunga Estate - Lynette and Trevor Come and enjoy a glass of wine and the beautiful views from our verandah. We also have our own extra virgin olive oil and dukkah for tasting and sale. 287 Chittering Valley Road, Lower Chittering Phone: 08 9571 8001 / 08 9271 4431 Email: info@kyotmunga.com.au Web: www.kyotmunga.com.au		REF 1	6 km to
 Western Range Wines Premium Western Australian wine producer now exporting globally. Consistent Trophy and Gold Medal winning wines. Free wine tasting and cellar door special offers! 1995 Chittering Rd, Lower Chittering Phone: 08 9571 8800 Email: admin@westernrangewines.com.au Web: www.westernrangewines.com.au		REF 2	0.5 km to
 White Dog Farm - Joanne & Peter Cellar Door & Luxury Adult Retreat A boutique vineyard with the signature wine a pale pink sparkling made in traditional champagne style. Producers of estate grown olives and medal winning extra virgin olive oil. 2035 Chittering Road, Lower Chittering Ph: 08 9571 8880 Email: info@whitedogfarm.com.au Web: www.whitedogfarm.com.au		REF 3	0.5 km to
 Stringybark Winery & Restaurant - Mary & Bruce Come and enjoy high quality food with medal winning wines in a wonderful setting of vines and native bushland. 2060 Chittering Road, Chittering Phone: 08 9571 8069 E-Mail: bruce@iinet.net.au Web: www.stringybarkwinery.com.au		REF 4	30 km to
 Briery Estate - Christine and Ron This vineyard produces a variety of excellent classic and new style wines. Relax on our lovely old jarrah verandah, sip your wine & enjoy the vista. 37 Briar Lane, Bindoon. Phone: 08 9576 1417 Mobile: 0419 440 540 Email: briewines@iinet.net.au Web: www.brieryestatewines.com		REF 5	25 km to
 Riseborough Estate Producer of premium West Australian wines. Cellar door in spacious modern winery. Enjoy valley views or picnic under the gum trees. Lot 21 Petersen Rise, Gingin Phone: 08 9575 1211 Email: info@riseborough.com.au Web: www.riseborough.com.au		REF 6	9 km to
 Jylland Vineyard - Edal and Terry Excellent wines, genuine cellar door value, relaxed, casual atmosphere. Epicurean platters. 77 Ashby Rd, Lennard Brook (Gingin) Phone: 08 9575 1442 Email: info@jylland.com.au Web: www.jylland.com.au		REF 7	total 71 km



Chittering Trails Network Master Plan 2013-2023

Cost Estimates

Chittering Trails Master Plan Implementation										
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Bindoon Townsite Heritage Walk										
Blackboy Ridge Enhancement										
Carty Reserve Walk Trail										
Mountain Bike Trail/Park Plan										
Wannamal Trail Enhancement										

Implementation Plan

				Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
				2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Project Cost	Cost	In-kind	Total	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
Bindoon Townsite Heritage Walk	14,750	7,790	22,540	-	14,750	-	-	-	-	-	-	-	-
Blackboy Ridge Enhancement	29,625	4,070	33,695	-	-	-	15,500	14,125	-	-	-	-	-
Carty Reserve Walk Trail	11,880	1,400	13,280	11,880	-	-	-	-	-	-	-	-	-
Mountain Bike Trail/Park Plan	22,000	-	22,000	-	-	-	-	-	22,000	-	-	-	-
Wannamal Trail Enhancement	20,940	4,335	25,275	-	-	20,940	-	-	-	-	-	-	-
Total	99,195	17,595	116,790	11,880	14,750	20,940	15,500	14,125	22,000	-	-	-	-

Operating Costs	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
Bindoon Townsite Heritage Walk	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200
Blackboy Ridge Walk Trail	5,500	5,500	5,500	-	5,500	5,500	5,500	5,500	5,500	5,500
Carty Reserve Walk Trail	2,114	2,114	2,114	2,114	2,114	2,114	2,114	2,114	2,114	2,114
Wannamal Heritage Trail	500	500	500	500	500	500	500	500	500	500
Annual maint. cost	9,314	9,314	9,314	3,814	9,314	9,314	9,314	9,314	9,314	9,314

Budget Allocation per annum	21,194	24,064	30,254	19,314	23,439	31,314	9,314	9,314	9,314	9,314
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Annual Allocations

From \$9,314 To \$31,314 Average \$18,684

Funding sources	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
Grants - Lotterywest Interpretation Grants	-	-	10,470	-	-	-	-	-	-	-
Grants - TQUAL	-	7,375	-	-	-	-	-	-	-	-
Grants - Trailswest (up to \$20,000)	11,880	-	-	15,500	-	-	-	-	-	-
Grants - Trailswest (over \$20,000)	-	-	-	-	-	11,000	-	-	-	-
Municipal funds (projects)	-	7,375	10,470	-	14,125	11,000	-	-	-	-
Municipal funds (operating)	9,314	9,314	9,314	3,814	9,314	9,314	9,314	9,314	9,314	9,314
Total funds	21,194	24,064	30,254	19,314	23,439	31,314	9,314	9,314	9,314	9,314

1) Design and Develop the Bindoon Townsite Heritage Trail	
Graphics preparation - photos and drawings (estimate only)	\$1,500
Directional signage (allow for 4 signs)	\$2,000
Road crossing warning signage (allow for 4 signs)	\$2,000
Trailhead signage (allow for 1 sign)	\$1,500
Interpretive panels (allow for 10 panels)	\$7,500
Walk trail markers (allow for 10 posts with markers)	\$250
Material Costs	\$14,750
<i>EDO to research possible interpretive site locations using local history books, the Municipal Inventory and State Heritage Register, to prepare suggested trail route</i>	\$1,560
<i>EDO to undertake Level 2 Community Engagement requesting comment / additional information regarding site suggestions (within bounded area).</i>	\$750
<i>EDO to finalise trail route, including consideration of submissions</i>	\$520
<i>EDO and Planning to prepare a Trail Development Plan, including map, sign locations and sign designs / interpretive information</i>	\$2,680
<i>Trail classification (DEC training, Shire staff time)</i>	\$520
<i>Installation of all signage (2 Staff for 2 days)</i>	\$1,760
In-kind costs	\$7,790
Total Project Cost	\$22,540

Annual maintenance will be minimal due to the use of existing paths.

Attention may need to be given to signage.

2) Enhance the Blackboy Ridge Walk Trail	
Graphics preparation - photos and drawings (estimate only)	\$1,500
Directional signage (allow for 4 signs)	\$2,000
Trailhead signage (allow for 1 sign)	\$1,500
Interpretive panels (allow for 5 panels)	\$3,750
Seating (allow for 2 on way up trail)	\$2,000
Walk trail markers (allow for 15 posts with markers)	\$375
Lookout signage (allow for 1 sign)	\$1,500
Trail enhancement of existing walkway @ \$7 per metre (1,500m)	\$10,500
Lookout enhancement, with 2 x seat and new rails (estimate)	\$5,000
Lookout (trailhead style) signage (allow for 1 sign)	\$1,500
Material Costs	\$29,625
<i>EDO to prepare suggested Enhancement Plan for comment</i>	<i>\$520</i>
<i>EDO to undertake Level 2 Community Engagement (as per Shire Plan) with the "Friends of" group and Chittering Landcare as the focus</i>	<i>\$750</i>
<i>EDO to finalise Enhancement Plan, including consideration of submissions</i>	<i>\$520</i>
<i>Trail classification (DEC training, Shire staff time)</i>	<i>\$520</i>
<i>Installation of all signage (2 Staff for 2 days)</i>	<i>\$1,760</i>
In-kind costs	\$4,070
Total Project Cost	\$33,695

Additional Projects	
500m northern lookout return loop, design and construct	\$12,500
Small bridge for return loop	\$3,000
Northern lookout return walk trail markers	\$125
Northern lookout upgrade (timber viewing platform, shelter, seating)	\$40,000
1,000m trail to southern lookout, design and construct	\$25,000
Southern lookout walk trail markers	\$250
Southern lookout trail signage	\$5,000
Southern lookout basic upgrade	\$20,000
Total	\$105,875

Annual maintenance could be in the vicinity of \$10,500.

3) Complete the Carty Reserve Walk Trail	
Car Park and Picnic Ground Plan prepared by Chittering Landcare	\$0
Pathway connecting car park area with interpretive signage area	\$0
Reserve revegetation planting (with grassed area left as requested by residents, allowing for trail and emergency vehicle access)	\$0
Trail construction, as per design, along existing fire break (302m)	\$4,530
Walk trail markers (allow for 30 posts with markers)	\$750
Directional signage (allow for 2 signs)	\$1,000
Trailhead interpretive signage underway by Landcare	\$0
Loop trail construction, as per design (320m)	\$4,800
Walk trail markers (allow for 32 posts with markers)	\$800
Material Costs	\$11,880
<i>Trail classification (DEC training, Shire staff time)</i>	\$520
<i>Installation of all new signage (2 Staff for 1 day)</i>	\$880
<i>In-kind costs</i>	<i>\$1,400</i>
Total Project Cost	\$13,280
Additional Projects	
Car park construction (0.24ha) estimate only	\$2,500
Total	\$2,500

Annual maintenance could be in the vicinity of \$2,114.

4) Consultant to Prepare Mountain Bike Trail Feasibility Plan	
Consultant consultation (with Shire and adjoining local government staff, local groups, DEC, other stakeholders; etc) (allow 3 days)	\$3,300
Consultant fieldwork to ascertain possible trail routes; construction and signage requirements (allow 10 days)	\$11,000
Consultant preparation of Trail Feasibility Plan (including mapping) (allow 5 days)	\$7,700
Total Project Cost	\$22,000

5) Enhance the Wannamal Heritage Trail	
Graphics preparation - photos and drawings (estimate only)	\$1,040
Directional signage (allow for 4 signs)	\$2,000
Road crossing signage (allow for 4 signs)	\$2,000
Interpretive panels (allow for 20 panels)	\$15,000
Walk trail markers (allow for 30 posts with markers)	\$750
Walk trail markers (allow for 10 markers affixed to trees)	\$150
Material Costs	\$20,940
<i>EDO to prepare suggested Enhancement Plan for comment</i>	<i>\$520</i>
<i>EDO to undertake Level 2 Community Engagement (as per Shire Plan) with the Wannamal Community and Chittering Landcare as the focus</i>	<i>\$750</i>
<i>EDO to finalise Enhancement Plan, including consideration of submissions</i>	<i>\$520</i>
<i>Trail classification (DEC training, Shire staff time)</i>	<i>\$235</i>
<i>Installation of all signage (2 Staff for 2 days)</i>	<i>\$1,760</i>
<i>Community research and preparation of interpretive panel wording (allow 2 days)</i>	<i>\$550</i>
In-kind costs	\$4,335
Total Project Cost	\$25,275

Annual maintenance is undertaken by the local community.

Marketing and Promotion	
<i>EDO to undertake existing signage audit</i>	<i>\$520</i>
<i>EDO to undertake existing publication audit</i>	<i>\$260</i>
<i>EDO to liaise with CCPAC re Sculpture Trail for incorporation within Trails Network Marketing Plan</i>	<i>\$520</i>
<i>EDO to prepare report to Discover Golden Horizons Committee re future plans and for incorporation within Trails Network Marketing Plan</i>	<i>\$260</i>
<i>EDO to liaise with Wine Trail Association regarding future plans for Chittering Valley Wine Trail - for incorporation within Trails Network Marketing Plan</i>	<i>\$520</i>
<i>EDO to prepare proposed Trails Network Marketing Plan for discussion and comment</i>	<i>\$1,040</i>
<i>EDO to undertake Level 2 Community Engagement (as per Shire Plan), with a focus on Peace Be Still, the Wannamal Community, the Chittering Tourist Association, Landcare, Northern Valleys News and the Northern Valleys Directory.</i>	<i>\$750</i>
<i>EDO to finalise Trails Network Marketing Plan for presentation to Council</i>	<i>\$520</i>
<i>EDO InDesign compilation of "Chit-Chat" Trail Note for each identified trail (6 plus the 8 Peace be Still trails)</i>	<i>\$7,280</i>
<i>EDO to create webpage/s within Shire site</i>	<i>\$1,040</i>
In-kind costs	\$11,670

Printing of "Chit-Chat" cover folders (1000)	\$1,000
Printing of "Chit-Chat Trail Notes for 14 trails (1000 of each, Wannamal and Bindoon to be 2 pages @ 34c per page)	\$5,440
Drive Trail Signage: Sculpture Trail - estimate 12 x Interpretive style, one to be located at the site of each Sculpture plus 'trailhead' style at Tourist Information Centre	\$10,500
Drive Trail Signage: Discover Golden Horizons (incorporating Chittering Valley Tourist Drive and link to Julimar Strip) - estimate 30 drive trail signs, developed in conjunction with the Discover Golden Horizons group	\$7,500
Update to six existing Information Boards in liaison with Chittering Tourist Association, estimated at \$1,000 per board	\$6,000
Advertising budget for launch and initial dissemination	\$7,500
Material Costs	\$37,940

Total Project Cost	\$49,610
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Link Lake Needonga Trail to Stonehouse Walk with a Boardwalk	
Consultant fieldwork (allow 3 days)	\$3,300
Consultant preparation of detailed trail upgrading report and mapping (allow 3 days)	\$3,300
Consultant liaison and proposal writing (Section 13 application) (allow 3 days)	\$3,300
Construction of 1.5m wide boardwalk (allow 170 metres @ \$1,085 per m)	\$184,450
Construction of viewing platforms (allow for 2)	\$21,654
Landcare research and preparation of interpretive panel wording (allow 2 days)	\$1,100
Graphics preparation - photos and drawings (estimate only)	\$1,500
Directional signage (allow for 2 signs)	\$1,000
Road crossing warning signage (allow for 2 signs)	\$1,000
Trailhead signage (allow for 1 sign)	\$1,500
Interpretive panels (allow for 20 panels, on boardwalk and along existing walks)	\$15,000
Walk trail markers (allow for 30 posts with markers)	\$750
Construction of loop trail northwards from Clune Park (allow for 250 metres each side)	\$7,500
Trailhead signage (allow for 1 sign)	\$1,500
Walk trail markers (allow for 6 posts with markers)	\$150
Construct bridge across narrow section of Brockman River (allow for 20 metres)	\$20,000
Trailhead signage (allow for 1 sign)	\$1,500
Interpretive panels (allow for 2 panels, on boardwalk and along existing walks)	\$1,500
Construction of trail southwards from Clune Park to Brockman Centre (3,500 metres)	\$87,500
Trailhead signage (allow for 1 sign)	\$1,500
Interpretive panels (allow for 5 panels)	\$3,750
Walk trail markers (allow for 35 posts with markers)	\$875
Material Costs	\$363,629
<i>EDO to prepare suggested Completion Plan for comment</i>	<i>\$1,040</i>
<i>EDO to undertake Level 3 Community Engagement (as per Shire Plan) with the Chittering Landcare, DEC and DIA as the focus</i>	<i>\$2,000</i>

<i>EMTS project management</i>	<i>\$8,000</i>
<i>Trail classification (DEC training, Shire staff time)</i>	<i>\$520</i>
<i>Installation of all signage (2 Staff for 2 days)</i>	<i>\$1,760</i>
<i>In-kind costs</i>	<i>\$13,320</i>
Total Project Cost	\$376,949



Chittering Trails Network Master Plan 2013-2023

Trail Photographs



Blackboy Ridge – Trail Head

Blackboy Ridge Walk Trail



Blackboy Ridge – Fire Break



Blackboy Ridge Walk Trail – Southern Track



Lake Needonga



Peace Be Still



Stonehouse Walk



Udumung Reserve



Wannamal Heritage Trail





Chittering Trails Network Master Plan 2013-2023

Trail Signage

Proposed Advisory Walking Signage



Level 1



Level 2



Level 3



Level 4



Level 5



Trail Head Example



Interpretive Example

Existing Signage



Black Boy Ridge Directional



Visitor Signage, various locations

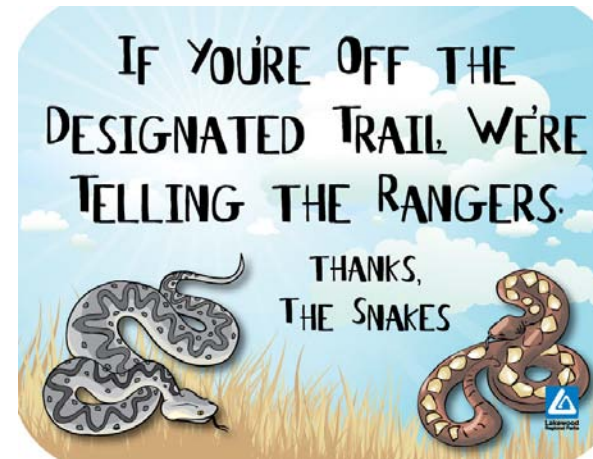


Chittering Valley Tourist Way 'Drive Trail'



Chittering Valley Wine Trail

Consideration could be given to various warning signs



CHITTERING TRAILS NETWORK VISITOR RISK MANAGEMENT GUIDELINES



In addition to a genuine concern for visitor welfare, the Shire of Chittering has a moral and legal responsibility to consider the personal safety and welfare of visitors utilising Shire managed trails. The aim is to minimise the potential for injuries to trail visitors.

These visitor risk management guidelines involve a broad-based understanding of the risks that may be encountered by a visitor, including the identification, analysis and efficient control of exposure to public liability risks.

The provision of a trail maintenance program will ensure that efficient and cost effective maintenance minimises the frequency and consequences of any possible incidents.

GOAL, OBJECTIVES, STRATEGIES AND PERFORMANCE INDICATORS

Goal

We seek to minimise the incidence of injury to visitors to Shire of Chittering managed trails through the implementation of a visitor risk management program and, by doing so, manage the Shire's exposure to public liability.

Objective 1

To minimise the likelihood of injury to our visitors through the implementation of measures which are reasonable in the context of hazard, activities undertaken, intensity of use and inherent character of the site.

Strategies

- Prepare and disseminate visitor risk management guidelines to staff, and ensure that they are familiar with the management of risks to visitors.
- Apply relevant Australian/New Zealand and/or industry standards and utilise appropriate expertise and quality of materials in the design and construction of facilities and structures. In the absence of standards, research will be undertaken to determine best practice.
- Carry out periodic risk assessments of Shire of Chittering managed trails.
- Maintain recordings to monitor the risks associated with sites including the frequency, situation and type of injury / incidents that occur on Shire managed trails.
- Promptly investigate all reported potential hazards or accidents on Shire managed trails and implement appropriate risk control measures.
- Use specialist advice to identify and rate risks where necessary.

Performance Indicators

The number and severity of reported incidents or injuries to visitors on Shire managed trails.

Objective 2

To encourage appropriate visitor behaviour with respect to hazards posed by natural and developed environments.

Strategies

- Provide appropriate information and / or training to ensure that staff possess adequate knowledge of codes of safe practice for risk assessment, risk control and incident management procedures.
- Provide brochures and other promotional material, including information on public safety, to enable visitors to consider risks in planning their activities on Shire managed trails and be empowered to act in an informed manner in providing for their own safety.
- Provide signs to bring to visitors' attention those hazards associated with structures, facilities or natural attractions which are not reasonably obvious. Where practicable, standard pictogram or symbol signs will be used for easy comprehension.
- Encourage safe practices and attitudes with respect to wildlife and other visitors by providing information brochures and displays.
- Use specialist expertise to identify and rate risks where necessary.

Performance Indicator

The number or reported visitor injuries which can be attributed in part or in full to inappropriate visitor behaviour.

Objective 3

Develop and apply efficient procedures for visitor risk management.

Strategies

- Maintain a level of insurance cover appropriate to the level of risk and the Shire's exposure to liability claims.
- Implement an incident reporting procedure for collecting and recording information about visitor injury and misadventure.
- Regularly review the status of claims, and through liaison with our insurers attempt to promptly finalise them on a commercial basis.
- Analyse the occurrences of visitor injury and misadventure to determine the best options for a suitable balance between risk control and risk financing management strategies.

Performance Indicators

- The number of claims or possible claims which are investigated in detail and evaluated with respect to potential liability implications within a pre-determined target time.